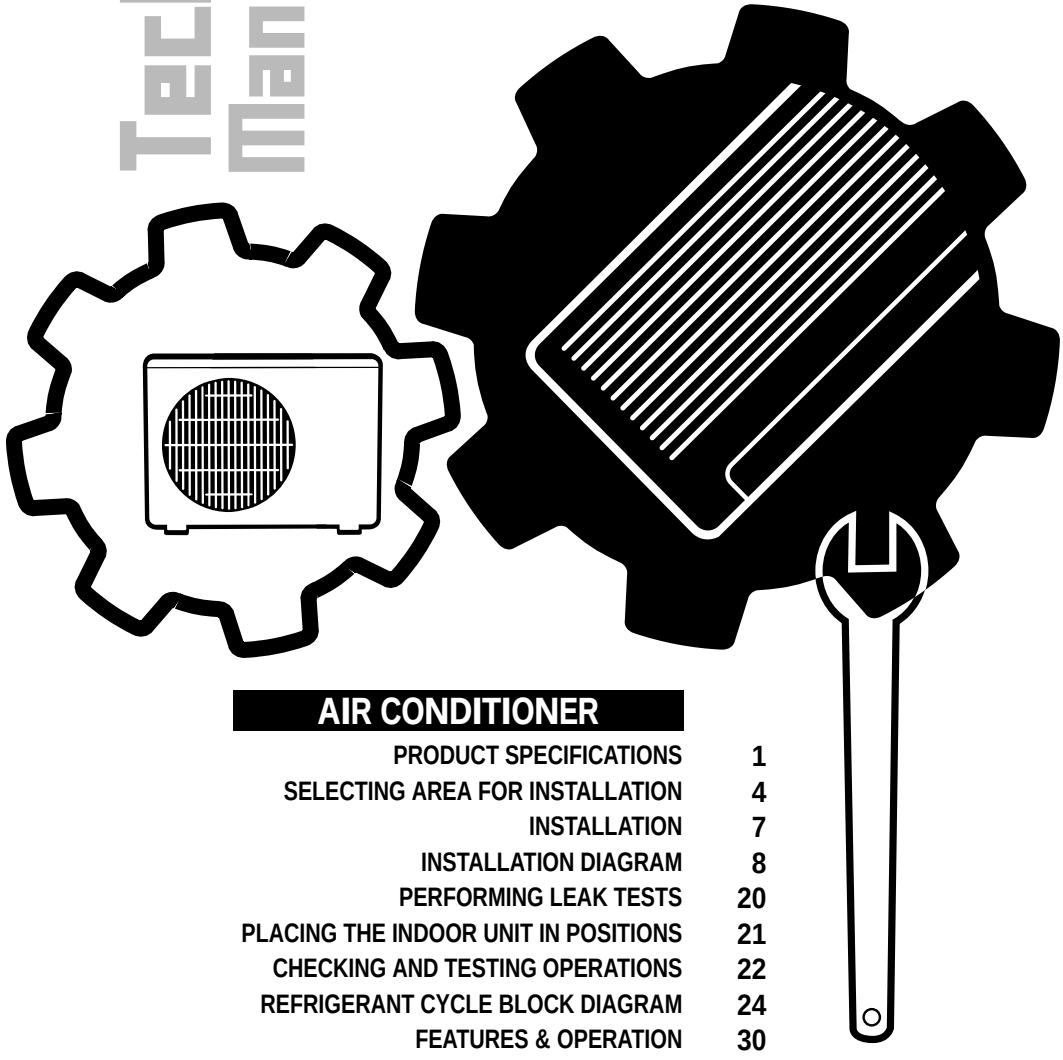
SAMSUNG

WALL MOUNTED TYPE

TECHNICAL Manual

Technical Manual



AIR CONDITIONER

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Product Specifications

Item			Model	AQ12✳5(6)MC		AS12✳5(6)MC		AQ09✳5(6)MA		AS09A5(6)MA		AS07A5(6)MA	
				Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit
Type			-	Wall-mounting		Wall-mounting		Wall-mounting		Wall-mounting		Wall-mounting	
Perfor-mance	Cooling		BTU/h	11500		11500		9000		9000		7500	
	Heating		BTU/h	12500		-		9500		-		-	
	Dehumiditying		l/h	1.9		1.9		1.4		1.4		0.9	
	Air volume	Cooling	m^3/min	7.4	19	7.4	19	6.0	18	6.0	18	5.6	18
		Heating		8.1	19	-	-	6.7	18	-	-	-	-
	Noise	Cooling	dB	41	53	41	53	38	51	38	51	35	50
		Heating		41	53	-	-	38	51	-	-	-	-
	Energy efficiency ratio	Cooling	BTU/h · W	8.6		8.7		10.0		10.0		11.0	
		Heating		9.2		-		10.8		-		-	
	Power		V-Hz	1-208 ~ 230/60		1-208 ~ 230/60		1-115-60		1-115-60		1-115-60	
Power	Power Consumption	Cooling	W	1340		1320		900		900		680	
		Heating		1360		-		880		-		-	
	Operating Current	Cooling	A	6.1		6.1		8.5		8.5		6.4	
		Heating		6.3		-		8.3		-		-	
	Power factor	Cooling	%	95.5		94.1		92.0		92.1		92.4	
		Heating		93.8		-		92.2		-		-	
	Starting current		A	30		30		30		30		30	
	Power cord	Length	m	-		-		-		-		-	
		Number of core wire		-		-		-		-		-	
	Fuse capacity		A	250V-10 / 16A		250V-10 / 16A		250V-10 / 16A		250V-10 / 16A		250V-10 / 16A	
Size	Outer Dimension	Width x Height x Depth	mm	790 x 245 x 165	762 x 532 x 280	790 x 245 x 165	762 x 532 x 280	790 x 245 x 165	660 x 497 x 235	790 x 245 x 165	660 x 497 x 235	790 x 245 x 165	660 x 497 x 235
			inch	31.1 x 9.6 x 6.5	30 x 20.9 x 11	31.1 x 9.6 x 6.5	30 x 20.9 x 11	31.1 x 9.6 x 6.5	26 x 19.6 x 9.3	31.1 x 9.6 x 6.5	26 x 19.6 x 9.3	31.1 x 9.6 x 6.5	26 x 19.6 x 9.3
	Weight			7.7	34.5	7.7	34.5	7.7	28.5	7.7	28.5	7.7	28.5
	Refrigerant pipe	Liquid	mm x L(MT)	ø6.35 x 5		ø6.35 x 5		ø6.35 x 5		ø6.35 x 5		ø6.35 x 5	
		GAS	mm x L(MT)	ø12.7 x 5		ø12.7 x 5		ø9.52 x 5		ø9.52 x 5		ø9.52 x 5	
	Drain hose		D x L(mm)	ø18 x 2000		ø18 x 2000		ø18 x 2000		ø18 x 2000		ø18 x 2000	
	Compressor	Type		Rotary		Rotary		Rotary		Rotary		Rotary	
		Model		-	48A135IV1EL	-	48AB5IV1EL	-	44B092HW1EL	-	44B092HW1EL	-	44A072HW1EB
		Motor Rated output		-	-	-	-	-	-	-	-	-	-
	Blower	Type		Cross-flow	Propeller	Cross-flow	Propeller	Cross-flow	Propeller	Cross-flow	Propeller	Cross-flow	Propeller
		Motor Type		Resin	steel	Resin	steel	Resin	steel	Resin	steel	Resin	steel
		Rated output	W	15	25	15	25	15	25	15	25	15	25
Heat exchanger				2ROW 12STEP	1ROW 20STEP	2ROW 12STEP	1ROW 20STEP	2ROW 12STEP	1ROW 18STEP	2ROW 12STEP	1ROW 18STEP	2ROW 12STEP	1ROW 18STEP
Refrigerant control unit				CAPILLARY TUBE		CAPILLARY TUBE		CAPILLARY TUBE		CAPILLARY TUBE		CAPILLARY TUBE	
Freezer oil capacity				410		410		360		360		260	
Freezer oil Name				SUN ISO-4GSDT		SUN ISO-4GSDT		SUN ISO-4GSDT		SUN ISO-4GSDT		SONTEX-200LT	
Refrigerant to change(R-22)			g(oz)	800 (28.2)		750 (26.5)		650 (22.9)		600 (21.2)		600 (21.2)	
Protection device				MRA 12002-9200		MRA 12002-9200		MRA 12093-12007		MRA 12093-12007		MRA 98706-12008	
Cooling test Condition				INDOOR UNIT : DB27°C WB19°C									
Maximum operation Condition				INDOOR UNIT : DB32°C WB23°C									

Product Specifications (cont.)

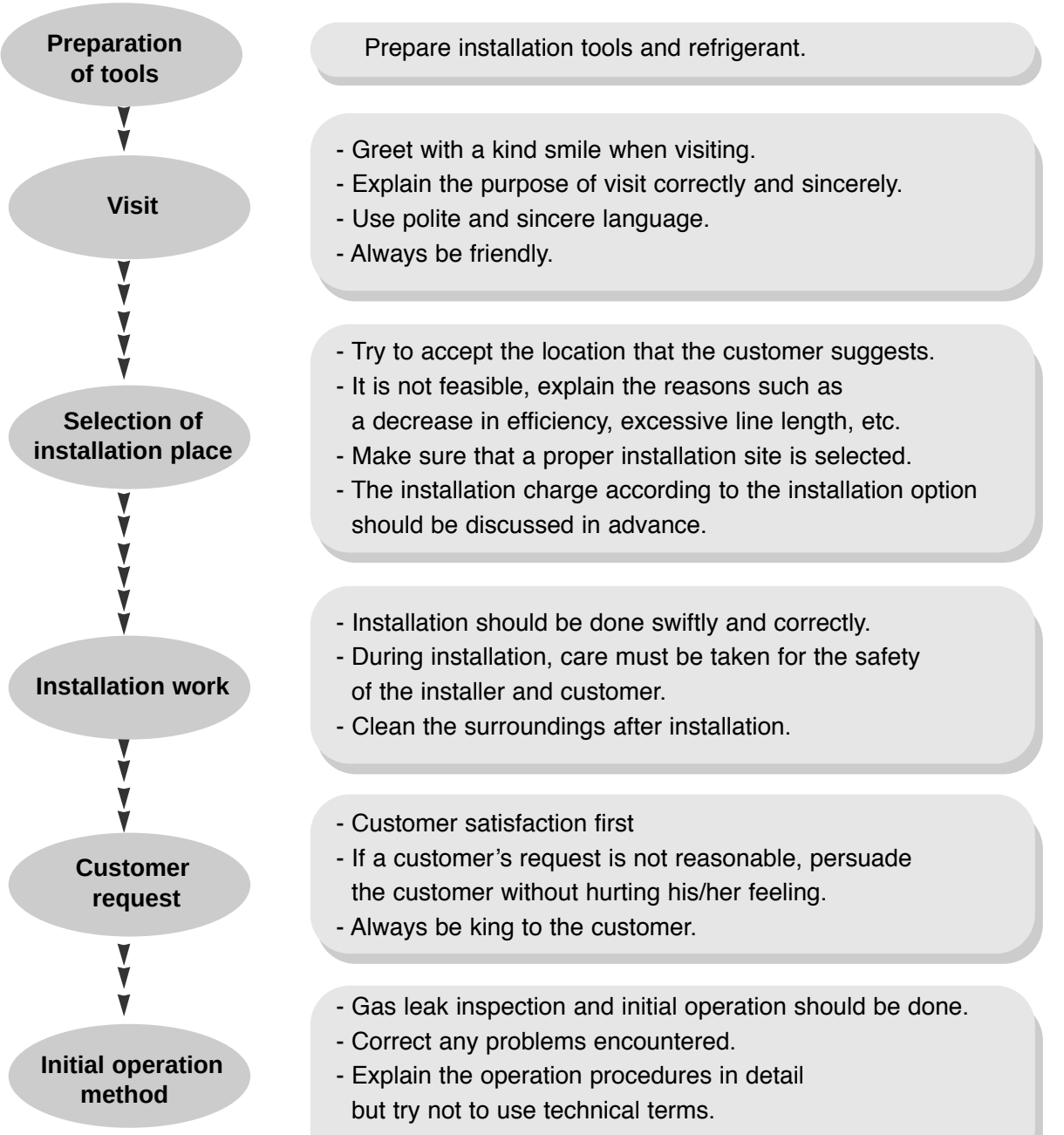
Item			Model	AQ24✳5(6)RC		AS24✳5(6)RC		AQ18✳5(6)RC		AS18✳5(6)RC	
				Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit
Type			-	Wall-mounting		Wall-mounting		Wall-mounting		Wall-mounting	
Perfor-mance	Cooling		BTU/h	23500		23500		17500		17500	
	Heating		BTU/h	24000		-		19000		-	
	Dehumiditying		l/h	3.0		3.0		2.5		2.5	
	Air volume	Cooling	m^3/min	14.0	36	14.0	36	13.5	30	13.5	30
		Heating		14.5	36	-	-	14.0	30	-	-
	Noise	Cooling	dB	48	62	48	62	46	57	46	57
		Heating		48	62	-	-	46	57	-	-
	Energy efficiency ratio	Cooling	BTU/h・W	10.0		10.0		9.1		10.0	
		Heating		10.0		-		10.0		-	
	Power		V-Hz	1-208~230-60		1-208~230-60		1-208~2 / 230-60		1-208 ~ 230-60	
Power	Power Consumption	Cooling	W	2350		2300		1920		1900	
		Heating		24000		-		1900		-	
	Operating Current	Cooling	A	10.5		10.5		8.8		8.6	
		Heating		11.0		-		8.8		-	
	Power factor	Cooling	%	97.3		95.2		94.9		96.1	
		Heating		94.9		-		93.9		-	
	Starting current		A	68		68		35		35	
	Power cord	Length	m	-		-		-		-	
		Number of core wire		-		-		-		-	
	Fuse capacity		A	250V-10 / 16A		250V-10 / 16A		250V-10 / 16A		250V-10 / 16A	
Size	Outer Dimension	Width x Height x Depth	mm	1080 x 275 x 204	942 x 364 x 655	1080 x 275 x 204	942 x 364 x 655	1080 x 275 x 204	942 x 364 x 655	1080 x 275 x 204	942 x 364 x 655
			inch	42.5 x 10.8 x 8.0	34.6 x 25.1 x 12.2	42.5 x 10.8 x 8.0	34.6 x 25.1 x 12.2	42.5 x 10.8 x 8.0	34.6 x 25.1 x 12.2	42.5 x 10.8 x 8.0	34.6 x 25.1 x 12.2
	Weight			13	63	13	62	13	48	13	47
	Refrigerant pipe	Liquid	mm x L(MT)	ø6.35 x 5		ø6.35 x 5		ø6.35 x 5		ø6.35 x 5	
		GAS	mm x L(MT)	ø15.8 x 5		ø15.8 x 5		ø12.7 x 5		ø15.8 x 5	
	Drain hose		D x L(mm)	ø18 x 2000		ø18 x 2000		ø18 x 2000		ø18 x 2000	
	Compressor	Type		Receipro		Receipro		Rotary		Receipro	
		Motor Model		-	H29B26UABCA	-	H29B26UABCA	-	48B190IV1EA	-	48B190IV1EH
		Rated output		-	-	-	-	-	-	-	-
	Blower	Type		Cross-flow	Propeller	Cross-flow	Propeller	Cross-flow	Propeller	Cross-flow	Propeller
		Motor Type		steel	steel	steel	steel	steel	steel	steel	steel
		Rated output	W	40	70	40	70	40	35	40	35
Heat exchanger				2ROW 15STEP	2ROW 24STEP	2ROW 15STEP	2ROW 24STEP	2ROW 15STEP	1ROW 24STEP	2ROW 15STEP	1ROW 24STEP
Refrigerant control unit				CAPILLARY TUBE		CAPILLARY TUBE		CAPILLARY TUBE		CAPILLARY TUBE	
Freezer oil capacity				-		-		600		600	
Freezer oil Name				SUN ISO-3GS		SUN ISO-3GS		SUN ISO-4GSDT		SUN ISO-4GSDT	
Refrigerant to change(R-22)			g(oz)	1650 (58.1)		1500 (52.8)		1250(44.0)		1000 (35.2)	
Protection device				Internal		Internal		MRA 12016-9622		MRA 12016-9622	
Cooling test Condition				INDOOR UNIT : DB27°C WB19°C							
Maximum operation Condition				INDOOR UNIT : DB32°C WB23°C							

Product Specifications (cont.)

Item			Model	AD18A1C2		AD26A1C2		AM18A1C2		AM26A1C2		AM27A1C3	
				Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit
Type			-	Wall-mounting		Wall-mounting		Wall-mounting		Wall-mounting		Wall-mounting	
Perfor-mance	Cooling		BTU/h(kW)	18000 (5.26)		25000 (7.32)		18000 (5.26)		25000 (7.32)		27000 (7.91)	
	Heating		BTU/h(kW)	19000 (5.56)		27000 (7.90)		-		-		-	
	Dehumiditying		l/h	2.4		3.6		2.4		3.6		3.6	
	Air volume	Cooling	m^3/min	7.5	-	8.5	-	7.5	-	8.5	-	A : 8.5, B/C : 6.5	-
		Heating		8.2	-	9.2	-	-	-	-	-	-	-
	Noise	Cooling	dB	43	56	47	60	43	53	47	60	A : 47, B/C : 40	59
		Heating		43	56	47	60	43	53	-	-	-	-
	Energy efficiency ratio	Cooling	BTU/h · W	10.58		9.54		10.46		9.69		10.62	
		Heating		11.87		9.64		-		-		-	
	Power		V-Hz	1-208 ~ 230-60		1-208 ~ 230-60		1-208 ~ 230-60		1-208 ~ 230-60		1-208 ~ 230-60	
Power	Power Consumption	Cooling	W	1700		2620		1720		2580		2540	
		Heating		1600		2800		-		-		-	
	Operating Current	Cooling	A	7.8		12.2		8.0		11.8		11.8	
		Heating		7.4		13.0		-		-		-	
	Power factor	Cooling	%	99.0		97.6		93.4		95.0		93.6	
		Heating		98.2		97.9		-		-		-	
	Starting current		A	30		30		30		30		30	
	Power cord	Length	m	-		-		-		-		-	
		Number of core wire		-		-		-		-		-	
	Fuse capacity		A	250V-10 / 16A		250V-10 / 16A		250V-10 / 16A		250V-10 / 16A		250V-10 / 16A	
Size	Outer Dimension	Width x Height x Depth	mm	815 x 298 x 182	787 x 620 x 320	815 x 298 x 182	1000 x 790 x 310	815 x 298 x 182	787 x 620 x 320	815 x 298 x 182	1000 x 790 x 310	815 x 298 x 182	1000 x 790 x 310
			inch	32.08 x 11.73 x 7.16	30.98 x 24.41 x 12.60	32.08 x 11.73 x 7.16	39.37 x 31.1 x 12.20	32.08 x 11.73 x 7.16	30.98 x 24.41 x 12.6	32.08 x 11.73 x 7.16	39.37 x 31.1 x 12.20	32.08 x 11.73 x 7.16	9.37 x 31.1 x 12.20
	Weight			9.6	56	9.6	69	9.6	56	9.6	67	9.6	70
	Refrigerant pipe	Liquid	mm x L(MT)	6.35 x 5		6.35 x 5		6.35 x 5		6.35 x 5		6.35 x 5	
		GAS	mm x L(MT)	9.52 x 5		12.7 x 5		9.52 x 5		12.7 x 5		A : 12.7 x 5, B/C : 9.52 x 5	
	Drain hose		D x L(mm)	18 x 2000		18 x 2000		18 x 2000		18 x 2000		18 x 2000	
	Compressor	Type		Rotary		Rotary		Rotary		Rotary		Rotary	
		Motor Type		-	-	-	-	-	-	-	-	-	-
		Rated output		-	-	-	-	-	-	-	-	-	-
	Blower	Type		Cross-flow	Propeller	Cross-flow	Propeller	Cross-flow	Propeller	Cross-flow	Propeller	Cross-flow	Propeller
		Motor Type		Resin	steel	Resin	steel	Resin	steel	Resin	steel	Resin	steel
		Rated output	W	40	30	40	70	40	30	40	70	40	70
Heat exchanger				2ROW 12STEP	2ROW 24STEP	2ROW 12STEP	2ROW 24STEP	2ROW 12STEP	2ROW 30STEP	2ROW 12STEP	2ROW 24STEP	2ROW 12STEP	2ROW 30STEP
Refrigerant control unit				CAPILLARY TUBE		CAPILLARY TUBE		CAPILLARY TUBE		CAPILLARY TUBE		CAPILLARY TUBE	
Freezer oil capacity				360		410		360		410		410	
Refrigerant to change(R-22)			g	A : 920, B : 920		A : 920, B : 920		A : 790, B : 790		A : 850, B :800		A : 850, B : 1000	
Protection device				MRA 12032-12008		MRA 12002-9200		MRA 12032-12008		MRA 12002-9200		MRA 12002-9200	
Cooling test Condition				INDOOR UNIT : DB26.7˚C WB19.4˚C, OUTDOOR UNIT : DB35.0˚C WB23.9˚C									
Maximum operation Condition				INDOOR UNIT : DB26.7˚C WB19.4˚C, OUTDOOR UNIT : DB46.1˚C WB23.9˚C									

1 Selecting Area for Installation

1 Installation Overview


Preparation of tools
Prepare installation tools and refrigerant.
Visit
- Greet with a kind smile when visiting.
- Explain the purpose of visit correctly and sincerely.
- Use polite and sincere language.
- Always be friendly.
Selection of installation place
- Try to accept the location that the customer suggests.
- It is not feasible, explain the reasons such as a decrease in efficiency, excessive line length, etc.
- Make sure that a proper installation site is selected.
- The installation charge according to the installation option should be discussed in advance.
Installation work
- Installation should be done swiftly and correctly.
- During installation, care must be taken for the safety of the installer and customer.
- Clean the surroundings after installation.
Customer request
- Customer satisfaction first
- If a customer's request is not reasonable, persuade the customer without hurting his/her feeling.
- Always be king to the customer.
Initial operation method
- Gas leak inspection and initial operation should be done.
- Correct any problems encountered.
- Explain the operation procedures in detail but try not to use technical terms. (Explain with reference to operation manual.)

1-1. Indoor Unit

1. Make sure that you install the indoor unit in an area providing good ventilation. It must not be blocked by an obstacle affecting the airflow near the air inlet and the air outlet.
2. Make sure that you install the indoor unit in an area allowing good air handling and endurance of vibration of the indoor unit.
3. Make sure that you install the indoor unit in an area where there is no source of heat or vapor nearby.
4. Make sure that you install the indoor unit in an area from which hot or cool air is spread evenly in a room.
5. Make sure that you install the indoor unit in an area away from TVs, audio units, cordless phones, fluorescent lighting fixtures and other electrical appliances (at least 3 1/4 ft).
6. Make sure that you install the indoor unit in an area which provides easy pipe connection with the outdoor unit, and easy drainage for condensed water.
7. Make sure that you install the indoor unit in an area which is large enough to accomodate the measurements shown in the figure on the next page.

Caution :

It is harmful to the air conditioner if it is used in the following environments: greasy areas (including areas near machines), salty areas such as coast areas, areas where sulfuric gas is present such as hot spring areas. Contact your dealer for advice.

1-2. Outdoor Unit

1. Make sure that you install the outdoor unit in area not exposed to the rain or direct sun light.(Install a separate sunblind if exposed to direct sun light.)

2. Make sure that you install the outdoor unit in area allowing the good air moment, not amplifying noise or vibration, especially to avoid disturbing neighbours.
(Fix the unit firmly if it is mounted in a high place.)

3. Make sure that you install the outdoor unit in area providing the good ventilation and which is not dusty. It must not be blocked by any obstacle affecting the airflow near the air inlet and the air outlet.

4. Make sure that you install the outdoor unit in area free from animals or plants.

5. Make sure that you install the outdoor unit in area not blocking the traffic.

6. Make sure that you install the outdoor unit in area easy to drain condensed water from the indoor unit.

7. Make sure that you install the outdoor unit in area which provides easy connection within the maximum allowable length of a coolant pipe.

MODEL	Amount of refrigerant to be added	Maximum allowable length
7K	0.21(oz/ft)	49.2(ft)
9K	0.21(oz/ft)	
12K	0.32(oz/ft)	49.2(ft)
18K	0.32(oz/ft)	
21K	0.43(oz/ft)	65.6(ft)

8. Make sure that you install the outdoor unit in an area which is large enough to accommodate the measurements shown in figure on the next page.

1-3. Remote Control Unit

1. Make sure that you install the remote control unit in an area free from obstacles such as curtains etc, which may block signals from the remote control unit.

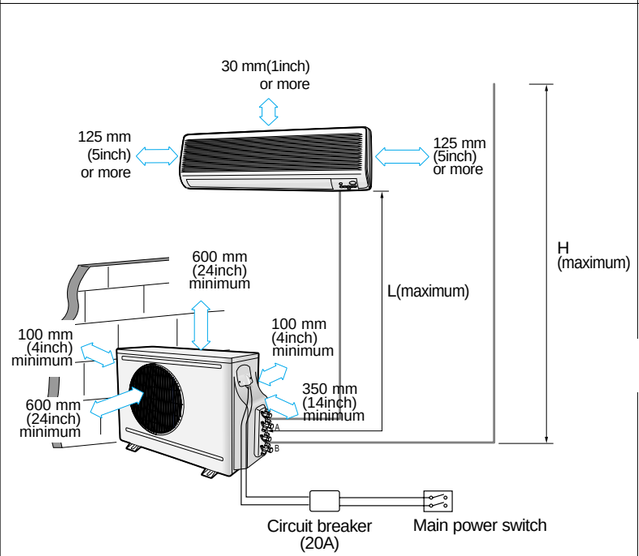
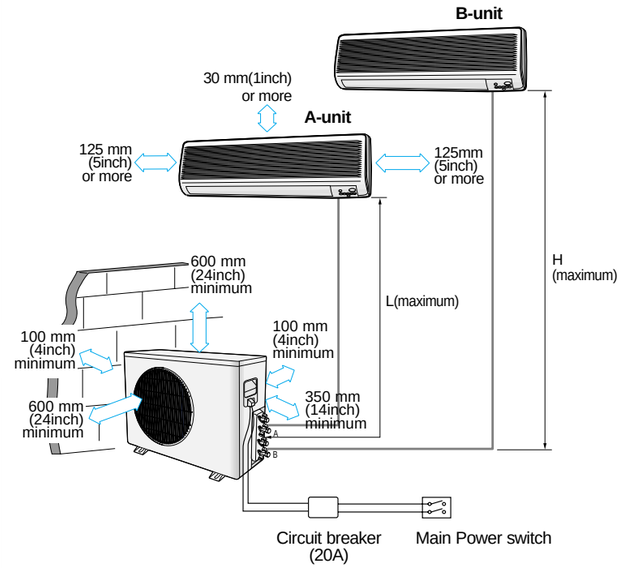
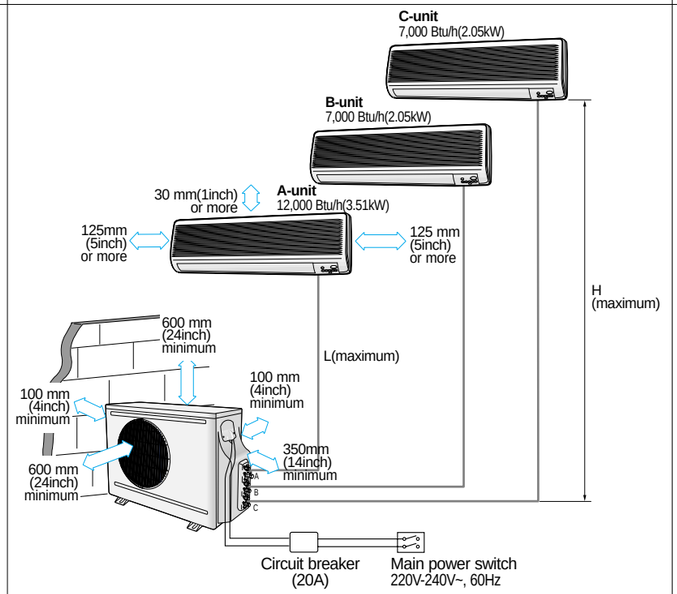
2. Make sure that you install the remote control unit in an area not exposed to direct sunlight, and where there is no source of heat.

3. Make sure that you install the remote control unit in an area away from TVs, audio units, cordless phones, fluorescent lighting fixtures and other electrical appliances (at least 3.25 ft.).

2 Installation

Respect the clearances and maximum lengths indicated in the diagram below when installing the unit.

✻ The designs and specifications are subject to change without notice.

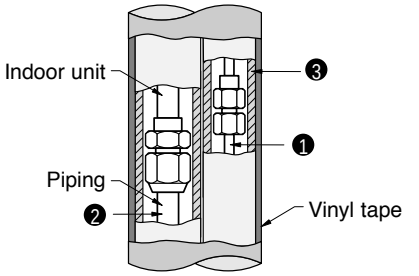
Model	AQ(AS)✻✻A✻MC(A)					AD(AM)✻✻A1C2		AM27A1C3	Remark
Layout									
Capacitor (BTU/h)	7000	9000	12000	18000	24000	18000	26000	27000	
Power Source (ph-V-Hz)	1-115-60		1-208/230-60			1-208/230-60		1-208/230-60	
Power Cable (V/A)				0.0038x3G		0.0038x3G	0.0038x3G	0.0038x3G	
Connection Cable(inch) H/P	0.0015x5G			0.0015x4G 0.0011x2G	0.0015x5G 0.0011x2G	0.0015x4G	0.0015x4G	-	
C/O	-	0.0015x3G		0.0015x5G -	0.0015x4G 0.0011x6G	0.0015x5G	0.0015x5G	0.0015x4G	
Circuit Breaker (A)						78.7	78.7	78.7	
Drain Hose Length (Inch)	78.7								
Pipes									
Size(inch) Liquid	1/4	1/4	1/4	1/4	1/4	A-ROOM=B ROOM=1/4	A-ROOM=B ROOM=1/4	A-ROOM=B-ROOM=C=ROOM=1/4	
Gas	3/8	3/8	1/2	1/2	5/8	A-ROOM=B ROOM=3/8	A-ROOM=B ROOM=1/2	A-ROOM=1/2, B-ROOM=C-ROOM=3/8	
Recommand Length(ft)(mm)	16.4(5)	16.4(5)	16.4(5)	16.4(5)	16.4(5)	16.4(5)	16.4(5)	16.4(5)	
L : Allowable Length(ft)(m)	49.2(15)	49.2(15)	49.2(15)	49.2(15)	65.6(20)	49.2(15)	49.2(15)	49.2(15)	
H : Allowable Height(ft)(m)	23.0(7)	23.0(7)	23.0(7)	23.0(7)	26.2(8)	23.0(7)	23.0(7)	23.0(7)	
Additional Refrigerant (oz/ft)	0.21(20g)	0.21(20g)	0.32(30g)	0.32(30g)	0.43(40g)	0.21(20g)	0.32(30g)	A-ROOM=0.32(30g) B-ROOM=C-ROOM=0.21(20g)	
Installation Spaces									
IndoorUnit(Long) mm(inch)	790(31.1)	790(31.1)	790(31.1)	1080(42.5)	1080(42.5)	815(32.08)	815(32.08)	815(32.08)	
(Width) mm(inch)	245(9.6)	245(9.6)	245(9.6)	275(10.8)	275(10.8)	298(11.73)	298(11.73)	298(11.73)	
Outdoor Unit(Long) mm(inch)	660(26)	660(26)	762(30)	942(34.6)	942(34.6)	787(30.98)	1000(39.37)	1000(39.37)	
(Width) mm(inch)	497(19.6)	497(19.6)	532(20.9)	364(25.1)	364(25.1)	620(24.4)	790(31.1)	790(31.1)	

3 Installation Diagram

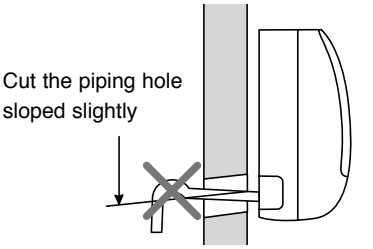
1 Deciding on where to Install the Air Conditioner

● Split type

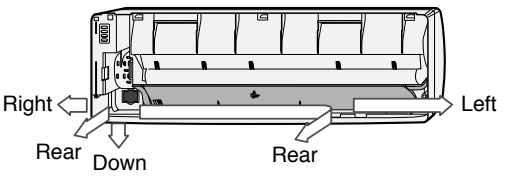
A Indoor unit gas leak test check point



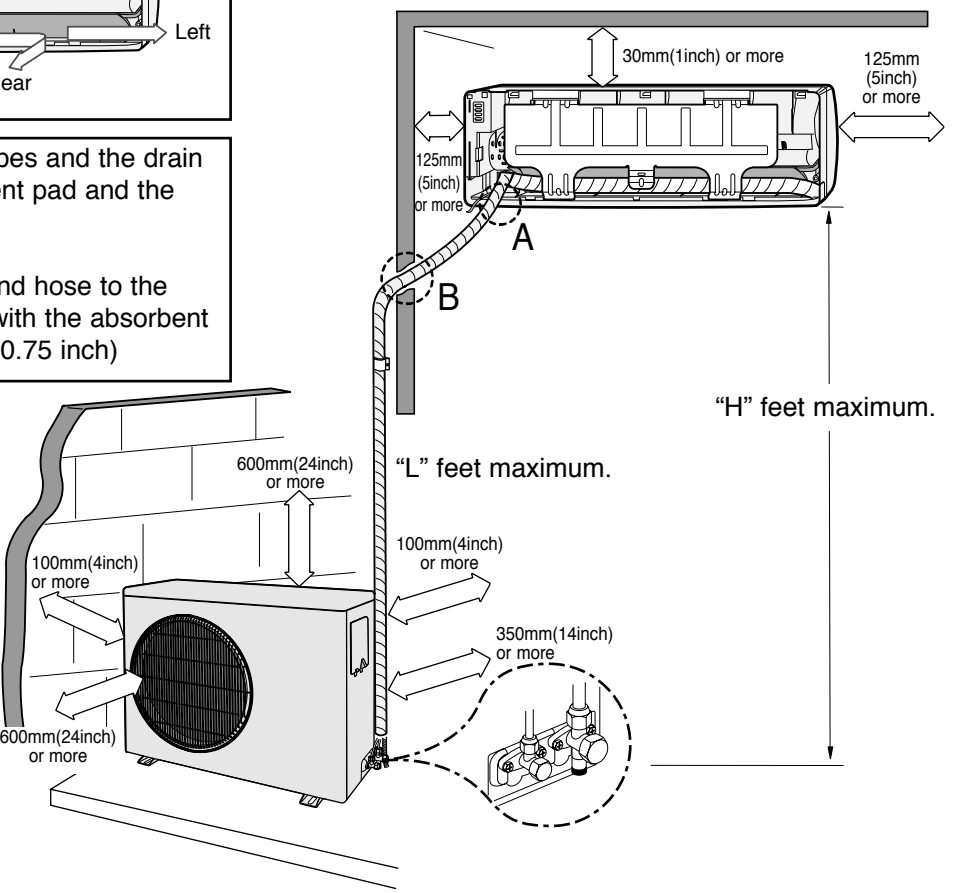
B Drain hose installation



Piping may be laid to the rear, left, right or down.



- Wrap the refrigerant pipes and the drain hose up in the absorbent pad and the vinyl tape.
- Triple wind the pipes and hose to the end of the indoor unit with the absorbent pad (make intervals of 0.75 inch)

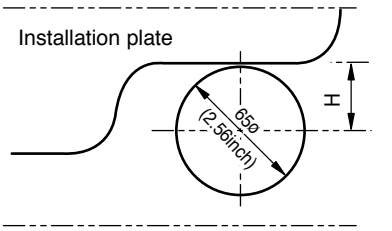


Model	L	H
7K	49.2	23
9K	49.2	23
12K	49.2	23
18K	49.2	26.2
24K	65.6	26.2
18K Multi	49.2	23
26K Multi	49.2	23
27K Multi	49.2	23

* The designs and specifications are subject to change without notice.

2 Fixing the Installation Plate

1. Determine the position of the pipe and drain hose hole refering to the right figure and drill the hole with an inner diameter of 2.5 inch so that it slants slightly downwards.



2. **If you are fixing the indoor unit to a… Then follow Steps…**

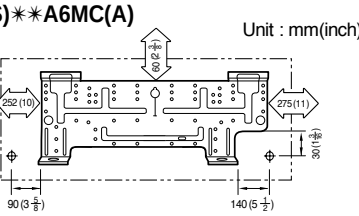
Wall	**3.**
Window frame	**4 to 6.**

3. Fix the installation plate to the wall in a manner appropriate to the weight of the indoor unit.

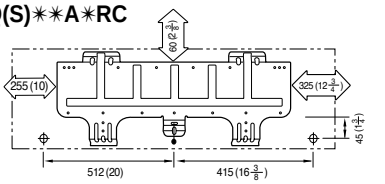
If you are mounting the plate on a concrete wall with anchor bolts, anchor bolts must not project by more than 0.79 inch.

AQ(S)✳✳A6MC(A)

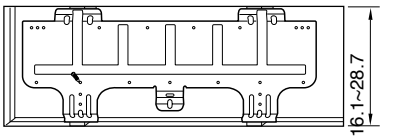
Unit : mm(inch)



AQ(S)✳✳A✳RC



4. Determine the position of the wooden uprights to be attached to the window frame.
5. Attach the wooden uprights to the window frame in a manner appropriate to the weight of the indoor unit.
6. Using tapped screws, attach the installation plate to the wooden uprights, as illustrated in the last figure opposite.



	Model	H		Model	H
Single	AQ(S)✳✳A6MC(A)	30mm(1.2inch)	**Multi**	AD✳✳A1C✳	
	AQ(S)✳✳A✳RC	45mm(1.8inch)		AM✳✳A1C✳	

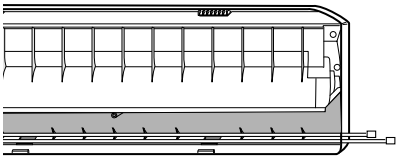
3 Purging the Unit

On delivery, the indoor unit is loaded with an inert gas. All this gas must therefore be purged before connecting the assembly piping. To purge the inert gas, proceed as follows.

Unscrew the caps at the end of each pipe.

Result *All inert gas escapes from the indoor unit.*

◆ To prevent dirt or foreign objects from getting into the pipes during installation, do NOT remove the caps completely until you are ready to connect the piping.

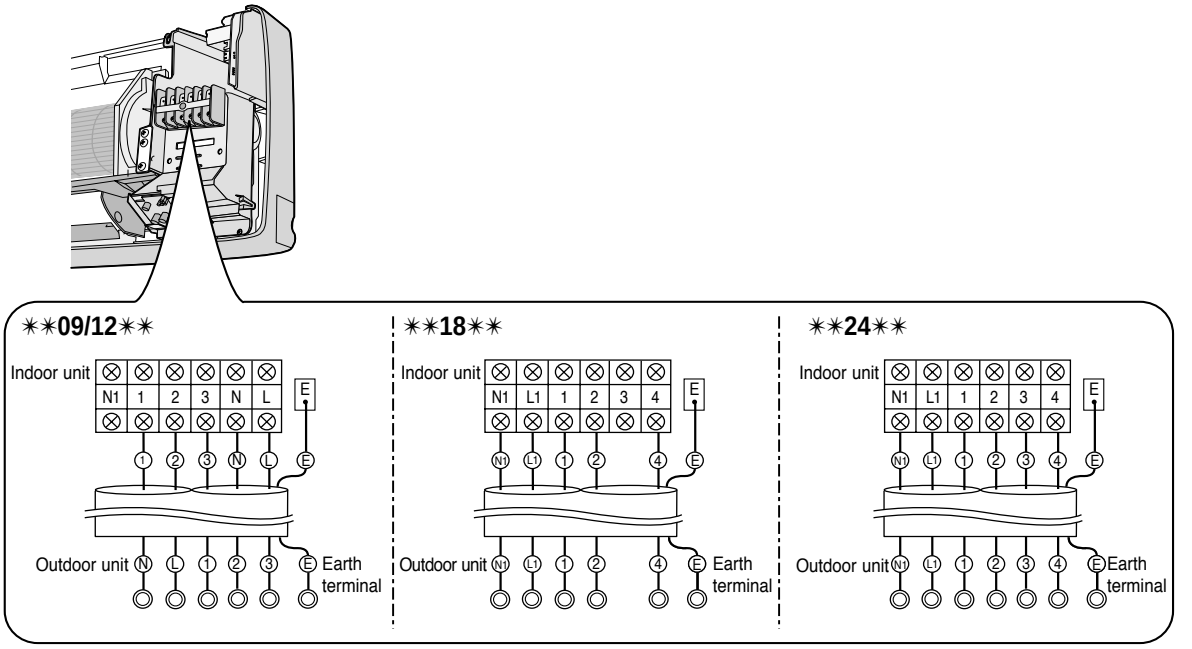


4 Connecting the Assembly Cable

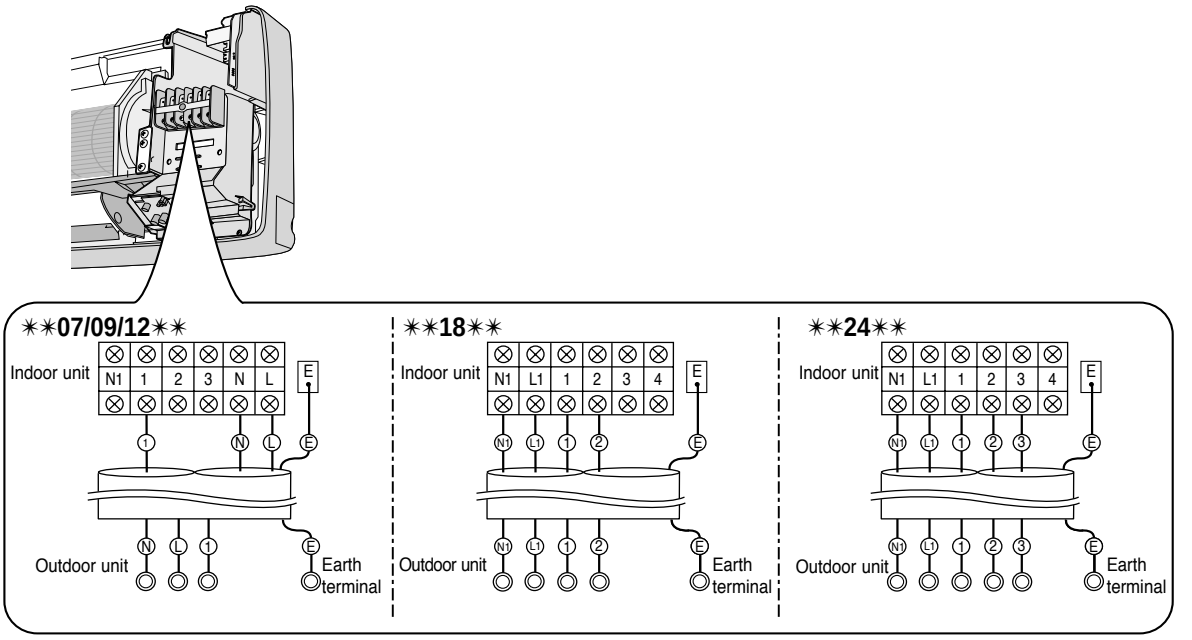
The indoor unit is powered from the outdoor unit via the assembly cable. If the outdoor unit is more than 16.4 ft away from the indoor unit, the cable must first be extended to a maximum of 49.2 ft. (65.6 ft for AQ24A2RC)

1	Extend the assembly cable if necessary.
2	Open the front grille by pulling on the tabs on the lower right and left sides of the indoor unit.
3	Remove the screw securing the connector cover.
4	Pass the assembly cable through the rear of the indoor unit and connect the assembly cable to terminals. ➢ Each wire is labelled with the corresponding terminal number.
5	Pass the other end of the cable through a 2.5 inch dia. hole in the wall.
6	Replace the connector cover, carefully tightening the screw.
7	Close the front grille.
8	Remove the screw securing the connector cover on the outdoor unit.
9	Connect the other end of the assembly cable to terminal of the outdoor unit.
10	Replace the connector cover on the outdoor unit.

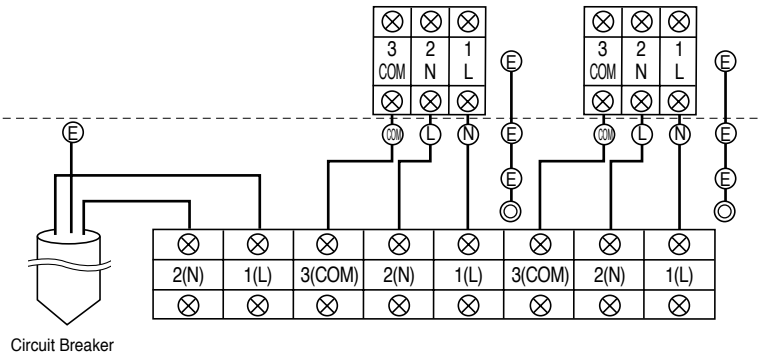
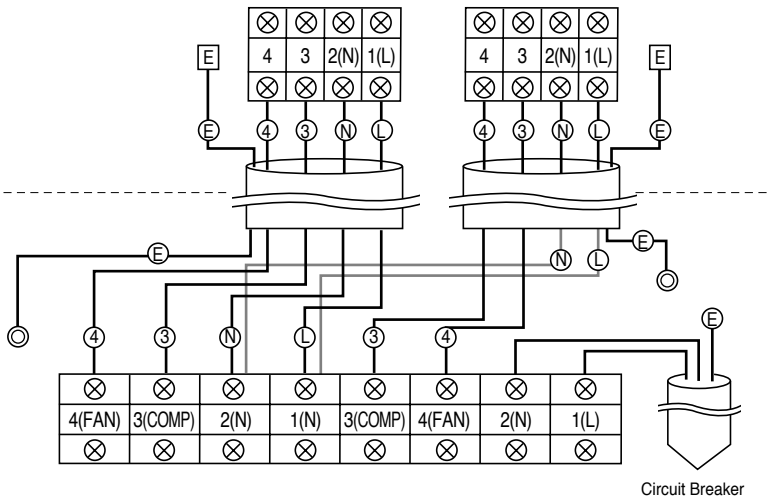
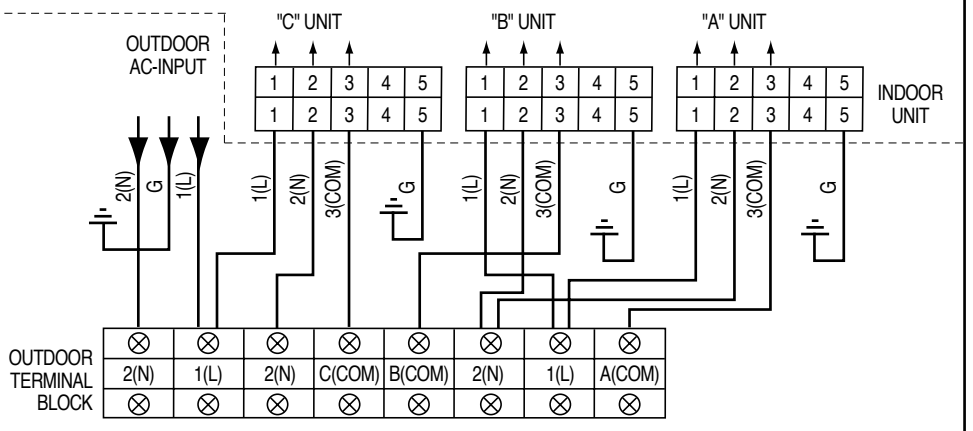
4-1. Connecting the Assembly Cable for the Heat pump model


✳✳09/12✳✳
Indoor unit
N1 1 2 3 N L E
Outdoor unit N L 1 2 3 E Earth terminal
✳✳18✳✳
Indoor unit
N1 L1 1 2 3 4 E
Outdoor unit N1 L1 1 2 4 E Earth terminal
✳✳24✳✳
Indoor unit
N1 L1 1 2 3 4 E
Outdoor unit N1 L1 1 2 3 4 E Earth terminal

4-2. Connecting the Assembly Cable for the cooling only models


✳✳07/09/12✳✳
Indoor unit
N1 1 2 3 N L E
Outdoor unit N L 1 E Earth terminal
✳✳18✳✳
Indoor unit
N1 L1 1 2 3 4 E
Outdoor unit N1 L1 1 2 E Earth terminal
✳✳24✳✳
Indoor unit
N1 L1 1 2 3 4 E
Outdoor unit N1 L1 1 2 3 E Earth terminal

4-3. Connecting the Assembly Cable for the Multi Type models

Model		Diagram
AD18A1C2 AD26A1C2	Indoor unit Outdoor unit	
AM18A1C2 AM26A1C2	Indoor unit Outdoor unit	
AM27A1C3	Indoor unit Outdoor unit	

4-4. Checking Correct Earthing

If the power distribution circuit does not have an earth or the earth does not comply with specifications, an earthing electrode must be installed. The corresponding accessories are not supplied with the airconditioner.

1 Select an earthing electrode that complies with the specifications given in the illustration opposite.

2 Determine a suitable location for the earthing electrode:
- ◆ In damp hard soil rather than loose sandy or gravel soil that has a higher earthing resistance
- ◆ Away from underground structures or facilities, such as gas pipes, water pipes, telephone lines and underground cables
- ◆ At least two metres away from a lightening conductor earthing electrode and its cable

➢ The earthing wire for the telephone line cannot be used to earth the air conditioner.

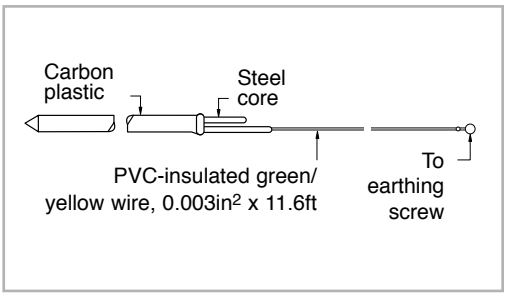
3 Dig a hole of the size indicated in the illustration opposite, drive the earthing electrode into position and cover the top of the electrode with the excavated soil.

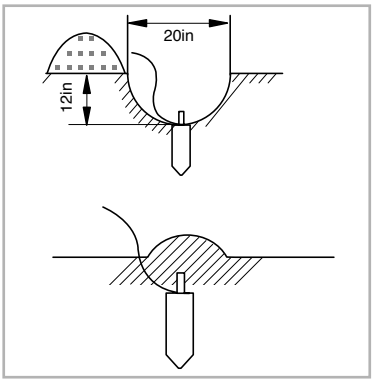
4 Install a green/yellow insulated earthing wire (Ø 0.06 inch, section 0.003in^2 or greater):
- ◆ If the earthing wire is too short, connect an extension lead, soldering the connection and wrapping it with insulating tape(do not bury the soldered connection)
- ◆ Secure the earthing wire in position with staples

➢ If the earthing electrode is installed in an area of heavy traffic, its wire must be connected securely.

5 Carefully check the installation, by measuring the earthing resistance with an earthing resistance tester. If the resistance is above the required level, drive the earthing electrode deeper into the ground or increase the number of earthing electrodes.

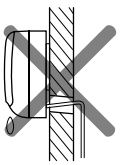
6 Connect the earthing wire to the earthing screw on the air conditioner.



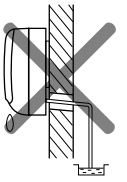


5 Installing and Connecting the Indoor Unit Drain Hose

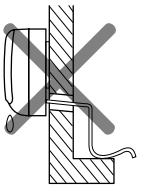
Care must be taken when installing the drain hose for the indoor unit to ensure that any condensation water is correctly drained outside. When passing the drain hose through the 2.5in hole drilled in the wall, check that none of the following situations occur.



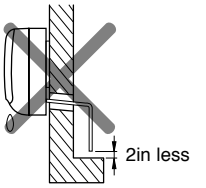
The hose must NOT slope upwards.



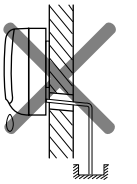
The end of the drain hose must NOT be placed in water.



Do NOT bend the hose in different directions.



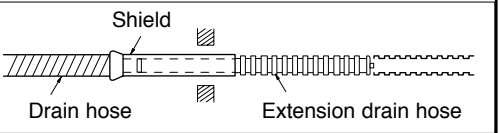
Keep a clearance of at least 2in between the end of the hose and the ground.



Do NOT place the end of the drain hose on the bottom of ditch.

To install the drain hose, proceed as follows

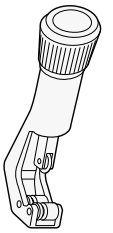
1. If necessary, connect the 6.5 ft extension to the drain hose.
2. If you are using the extension, insulate the inside part of the extension drain hose with a shield.
3. Pass the drain hose under the refrigerant piping, taking care to keep the drain hose tight.
4. Pass the drain hose through the hole in the wall, making sure that it is sloping downwards, as shown in the illustrations above.

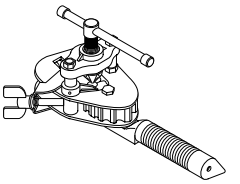


The hose will be fixed permanently into position once the whole installation has been tested for gas leaks; refer to page 33 for further details.

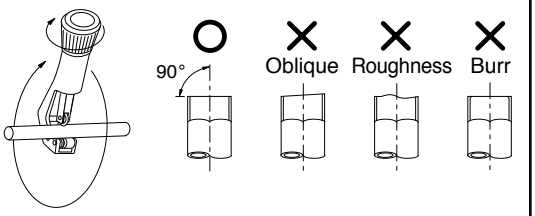
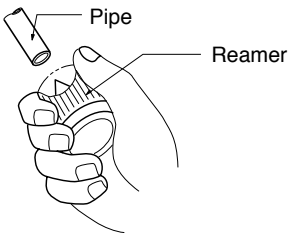
6 Flare Modification

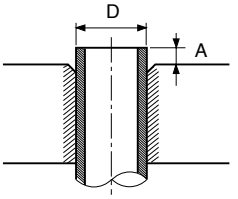
TOOLS USED





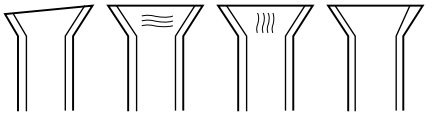
FLARE MODIFICATION PROCEDURE

1. Cut the pipe using a pipe cutter.	
2. Remove burrs at the tip of the pipe cut. Caution *Burrs not removed may result in leakage of gas.*	
3. Insert a flare nut into the pipe and modify flare.	



Outer diameter	A
ø6.35(ø0.25in)	1.3mm(0.05inch)
ø9.52(ø0.37in)	1.7mm(0.07inch)
ø12.7(ø0.5in)	2.0mm(0.08inch)
ø15.88(ø0.62in)	2.2mm(0.09inch)

*** Improper flaring**



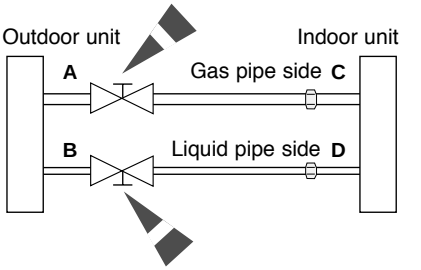
7 Air-Purge Procedure

The outdoor unit is loaded with sufficient R-22 refrigerant for 16.4 ft of piping. The air in the indoor unit and in the pipe must be purged. If air remains in the refrigeration pipes, it will affect the compressor, reduce to cooling/heating capacity and could lead to a malfuction. Refrigerant for air purging is not charged in the outdoor unit. Use Vacuum Pump as shown at the figure.

1. Connect each assembly pipe to the appropriate valve on the outdoor unit and tighten the flare nut.

2. Referring to the illustration opposite, tighten the flare nut first manually and then with a wrench, applying the following torque.

Pipe	Outer Diameter	Torque(lb·in)
Liquid refrigerant	0.25in	139
Gas refrigerant	0.37in	260
Gas refrigerant	0.5in	434
Gas refrigerant	0.62in	608

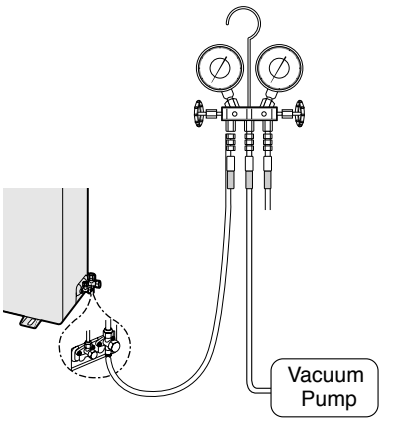


3. Connect the charging hose of low pressure side of manifold gauge to the packed valve having a service port as shown at the figure.

4. Open the valve of the low pressure side of manifold gauge counterclockwise.

5. Purge the air from the system using vacuum pump for about 10 minutes.

- ◆ Close the valve of the low pressure side of manifold gauge clockwise.
- ◆ Make sure that pressure gauge show -0.1MPa(-0.98atm) after about 10minutes.
  This procedure is very important in order to avoid gas leak.
- ◆ Turn off the vacuum pump
- ◆ Remove the hose of the low pressure side of manifold gauge.

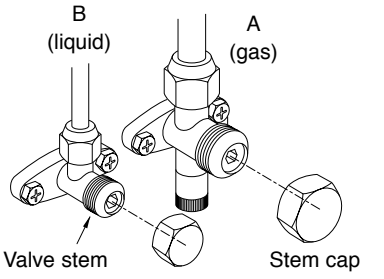


6. Set valve cork of both liquid side and gas side of packed valve to the open position.

7. Mount the valve stem nuts and the service port cap to the valve, and tighten them at the torque of 159.3 lb·in with a torque wrench.

8. Check for gas leakage.

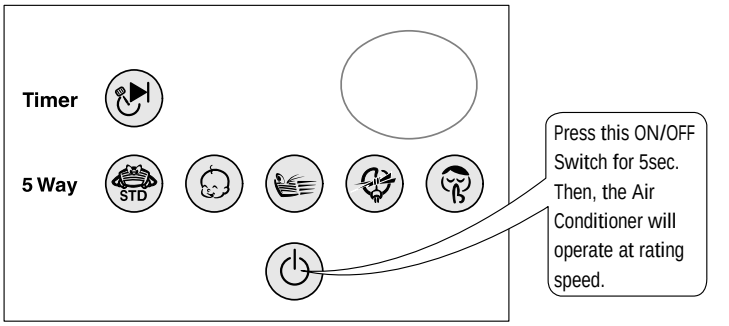
- ◆ At this time, especially check for gas leakage from 3-way valve's stem nuts, and from the service port cap.

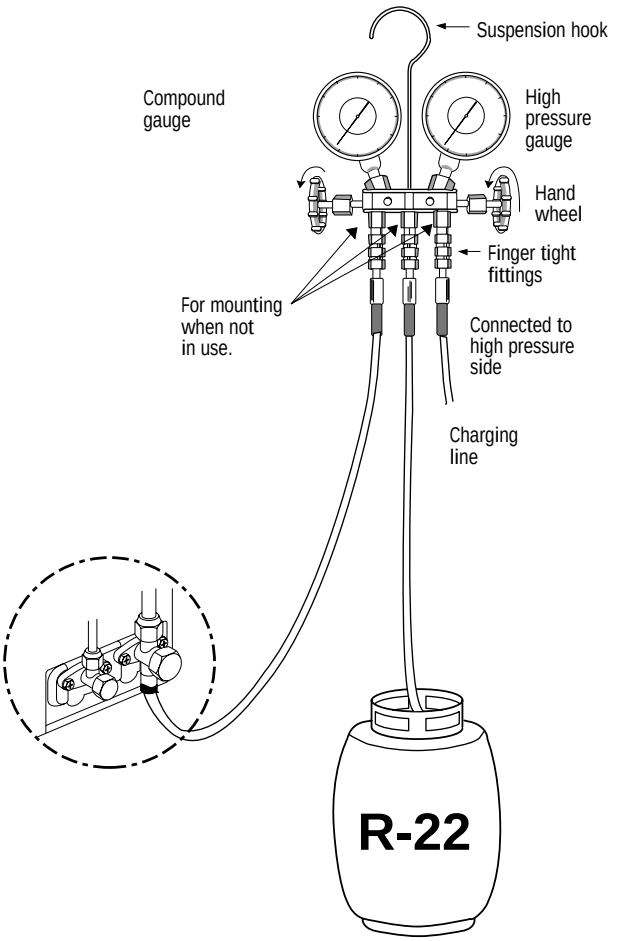


8 Refrigerant Refill

• Refill an air-conditioner with refrigerant when refrigerant has been leaked at installing or using operation.

1. Purge air(for new installation only).
2. Turn the 3-way valve clockwise to close, connect the pressure gauge(low pressure side) to the service valve, and open the 3-way valve again.
3. Connect the tank to refill with Refrigerant
4. Set the unit to Low pressure checking mode.
   * Press the ON/OFF switch for 5 second.
   *All lamps blink on the indoor unit.
5. Check the pressure indicated by the pressure gauge(low pressure side).
   * Refer to Low pressure graph.
6. Open the refrigerant tank and fill with refrigerant until the rated pressure is reached.
   * It is recommended not to put the refrigerant in too quickly, but gradually while operating a pressure valve.
7. Stop operation of the air conditioner.
8. Close the 3-way valve, disconnect the pressure gauge, and open the 3-way valve again.
9. Close the cap of each valve.





9 Refrigerant Adjustment

Class	At installation		At service	
Connection Pipe Length	Air-Purge Method	Refrigerant Adjustment	Air-Purge Method	Refrigerant Quantity
Standard 16.4ft	Refer to the detailed Air-Purge Procedure	Unnecessary	Purge air using a vacuum pump or an additional refrigerant cylinder.	refer to specification sheet
Max. ~49.2ft (AQ24A2RC : 65.6ft)		Add "A" of refrigerant (R-22) for every 1m(1ft).		Add "A" of refrigerant (R-22) for every 1m(1ft).

To meet the specifications such as cooling and heating capacity, sound level, vibration, and reliability, piping of standard length or less should be used.

MODEL	"A"	"B"
AQ(S)✻✻A6M	20g/m(0.21oz/ft)	7m(23ft)
AQ(S)12A6MC	30g/m(0.32oz/ft)	7m(23ft)
AQ(S)18A6RC	30g/m(0.32oz/ft)	8m(26.2ft)
AQ(S)24A2RC	40g/m(0.43oz/ft)	8m(26.2ft)

✻ *Additional refrigerant should be added according to the chart above. Lack of refrigerant can result in decreased cooling or heating capacity, and compressor failure.*

✻ *Then vertical rise or fall of refrigerant line should not exceed "B" above.*

✻ *When the connection pipe is extended longer than 16.4 ft, it might be necessary to increase the diameter of electric wires to prevent the voltage during the start-up from falling below 85% of the rated voltage. Check the voltage drop using a volt meter.*

10 Flare Nut Fixing Torque

Outer diameter	Torque (lb·in)	
	Fixing Torque	Final Torque
ø 0.25 in (Liquid Side)	139	174
ø 0.37 in (Gas Side)	260	304
ø 0.5 in (Gas Side)	434	477
ø 0.62 in (Gas Side)	608	651

11 "Pump down" Procedure

Pump down shall be carried out when an evaporator is replaced or when the unit is relocated.

1. Remove the caps from the 2-way valve and the 3-way valve.

2. Turn the 3-way valve clockwise to close and connect a pressure gauge (low pressure side) to the service valve, and open the 3-way valve again.

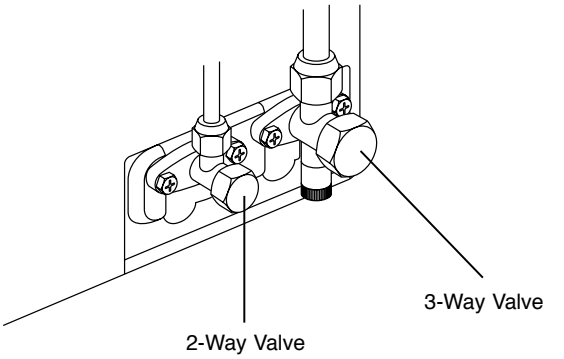
3. Set the unit to cool operation mode. (Check if the compressor is operating.)

4. Turn the 2-way valve clockwise to close.

5. When the pressure gauge indicates "0" turn the 3-way valve clockwise to close.

6. Stop operation of the air conditioner.

7. Close the cap of each valve.



Relocation of the air conditioner

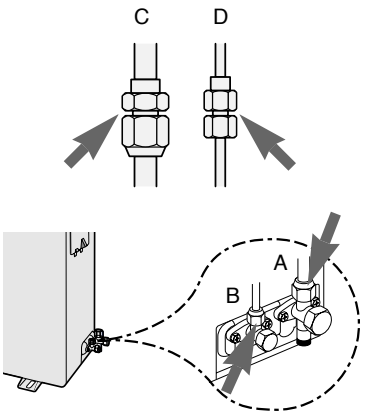
Refer to this procedure when the unit is relocated.

1. Carry out the pump down procedure (refer to the details of 'pump down').
2. Remove the power cord.
3. Disconnect the assembly cable from the indoor and outdoor units.
4. Remove the flare nut connecting the indoor unit and the pipe.
   At this time, cover the pipe of the indoor unit and the other pipe using a cap or vinyl plug to avoid foreign material entering.
5. Disconnect the pipe connected to the outdoor unit.
   At this time, cover the valve of the outdoor unit and the other pipe using a cap or vinyl plug to avoid foreign material entering.
6. Make sure you do not bend the connection pipes in the middle and store together with the cables.
7. Move the indoor and outdoor units to a new location.
8. Remove the mounting plate for the indoor unit and move it to a new location.

4 Performing Leak Tests

Before completing the installation (insulation of the cables, hose and piping and fixing of the indoor unit to the installation plate), you must check that there are no gas leaks.

To check for gas leaks on the...	**Then, using a leak detector, check the...**
Indoor unit	Flare nuts at the end of sections C and D.
Outdoor unit	Valves on sections A and B.



5 Placing the Indoor Unit in Position

Once you have checked that there are no leaks in the system, you can insulate the piping, hose and cables and place the indoor unit on the installation plate.

1. To avoid condensation problems, place heat-resistant polyethylene foam separately around each refrigerant pipe in the lower part of the indoor unit.

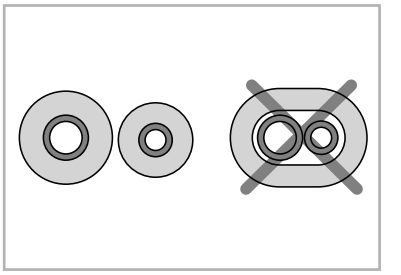
2. Wind insulating tape around the pipes, assembly cable and drain hose.

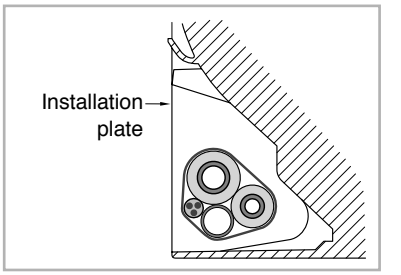
3. Place the resulting bundle carefully in the lower part of the indoor unit, making sure that it does not jut out from the rear of the indoor unit.

4. Hook the indoor unit up to the installation plate and move the unit to the right and left until you are sure that it is securely to place in.

5. Finish wrapping insulating tape around the rest of the piping leading to the outdoor unit.

6. Using clamps (optionally supplied), attach the piping to the wall wherever possible.





6 Checking and Testing Operations

1 Split type

To complete the installation, perform the following checks and tests to ensure that the air conditioner is operating correctly.

1 Review all the following elements in the installation:

- ◆ Installation site strength
- ◆ Piping connection tightness to detect any gas leakages
- ◆ Connection wiring
- ◆ Heat-resistant insulation of the piping
- ◆ Drainage
- ◆ Earthing wire connection
- ◆ Correct operations (follow the steps below)

2 Press the On/Off button.

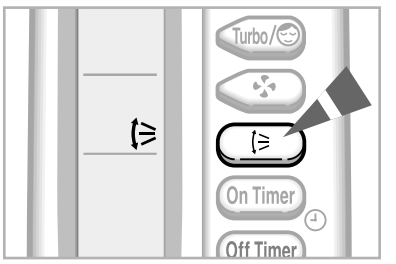
Result
- ◆ *The indicator lights on the indoor unit flash at half-second intervals.*
- ◆ *While the indoor unit opens, the indoor unit fan runs to start.*

3 Press the Turbo/ button.

Result
- ◆ *The outdoor unit operates in cooling or heating mode as following the room temperature.*

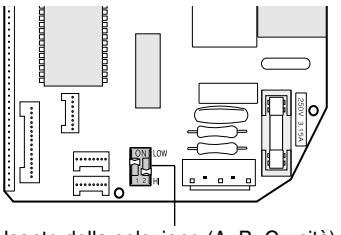
4 Air flow direction

◆ Press the button and check that the air flow blades work properly.



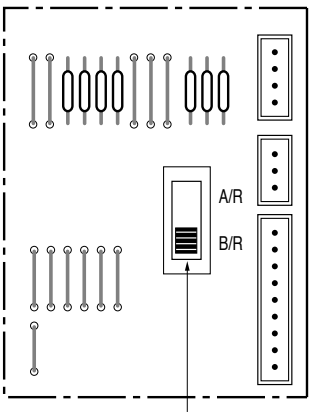
2 Mulity Unit (2-Room, 3-Room)

UNITÀ INTERNA



Pulsante della selezione (A, B, C unità)

INDOOR UNIT



Room select switch(A, B unit)

ROOM NO	ROOM select switch
A unit	A / R
B unit	B / R

To complete the installation, perform the following checks and tests to ensure that the air conditioner is operating correctly.

1 Review all the following elements in the installation:

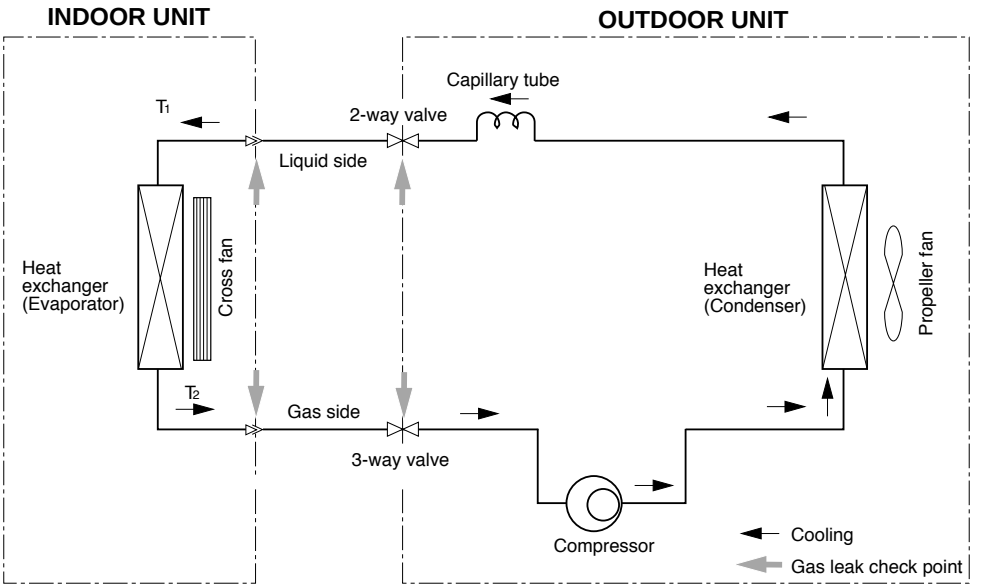
- Installation site strength
- Piping connection tightness to detect any gas leakages
- Connection wiring
- Heat-resistant insulation of the piping
- Drainage
- Earthing wire connection
- Correct operations(follow the steps below)
- Room select switch in the indoor unit

Room NO	Pulsante del selezione	
	1(#19)	2(#20)
A unit	L	L
A unit	L	H
B unit	H	H
C unit	H	L

2 Apply the power to the outdoor unit.
- Check the fuse(250V~, 5A): The fuse is open when the power line (L,N) is short.

7 Refrigerant Cycle Block Diagram

1 Heat pump

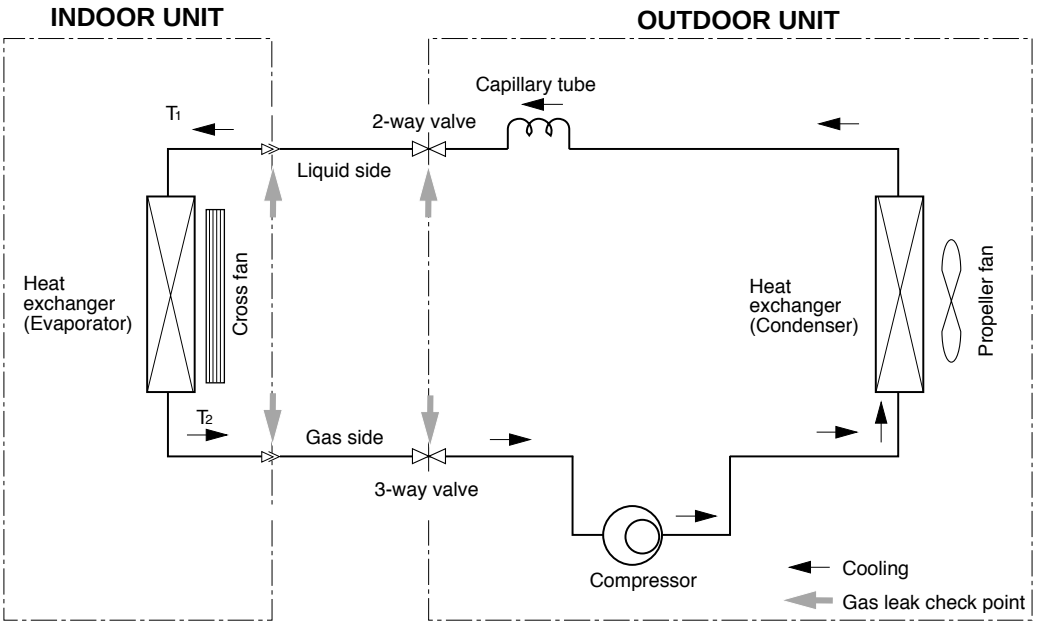


※**Note :** The check valve is not applied to UQ09A6MA.

Refrigerating cycle temperature and pressure

MODEL	Operating Condition		STD Pressure (psi) 3-Way Valve	Piping Temp(°F)		Use Temp. Condition(°F)			
				T1	T2	Indoor		Outdoor	
						DB	WB	DB	WB
AQ09A6MA AQ12A6MC	Cooling	Standard	70~74	48~53	48~53	80	67	95	75
		Max over load	-	60~64	60~64	80	67	115	75
		Low temp	-	34~39	34~39	67	57	67	57
	Heating	Standard	248~287	99~110	134~155	70	60	47	43
		Max over load		100~109	140~160	80	-	75	65
		Low temp		85~95	107~120	70	60	35	33
AQ24A2RC	Cooling	Standard	57~71	46~54	46~54	80	67	95	75
		Max over load	-	-	-	80	67	115	75
		Low temp	-	-	-	67	57	67	57
	Heating	Standard	270~327	90~97	140~158	70	60	47	43
		Max over load	-	-	-	80	-	75	65
		Low temp	-	-	-	70	60	35	33
AQ18A6RC	Cooling	Standard	64~78	46~54	46~54	80	67	95	75
		Max over load	-	-	-	80	67	115	75
		Low temp	-	-	-	67	57	67	57
	Heating	Standard	270~327	90~97	140~158	70	60	47	43
		Max over load	-	-	-	80	-	75	65
		Low temp	-	-	-	70	60	35	33

2 Cooling Only

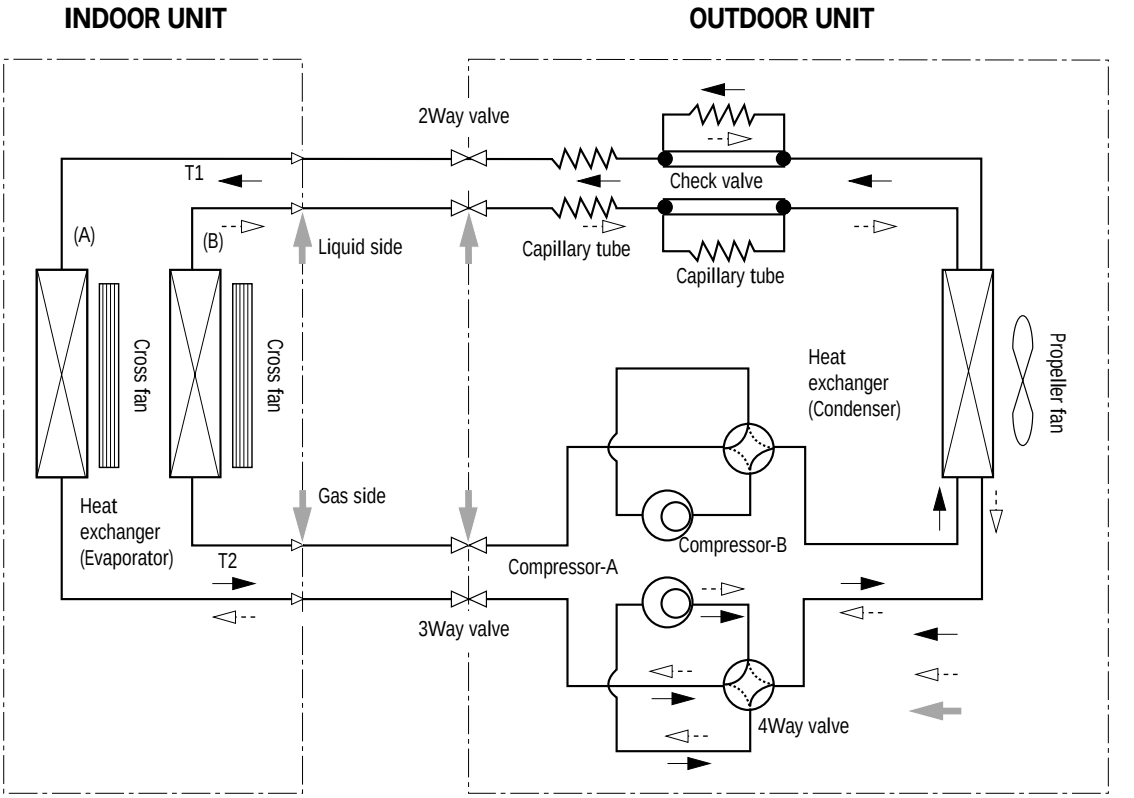


Refrigerating cycle temperature and pressure

MODEL	Operating Condition		STD Pressure (psi) 3-Way Valve	Piping Temp(°F) T1	Piping Temp(°F) T2	Use Temp. Condition(°F) Indoor DB	Indoor WB	Outdoor DB	Outdoor WB
AS07A6MA	Cooling	Standard	64~78	50~54	50~54	50	67	95	75
AS09A6MA		Max over load	-	61~64	61~64	80	67	115	75
AS12A6MC		Low temp	-	34~39	34~39	67	57	67	57
AS24A2RC	Cooling	Standard	57~71	46~54	46~54	80	67	95	75
		Max over load	-	-	-	80	67	115	75
		Low temp	-	-	-	67	57	67	57
AS18A6RC	Cooling	Standard	64~78	50~54	50~54	80	67	95	75
		Max over load	-	-	-	80	67	115	75
		Low temp	-	-	-	67	57	67	57

3 Multi-Type

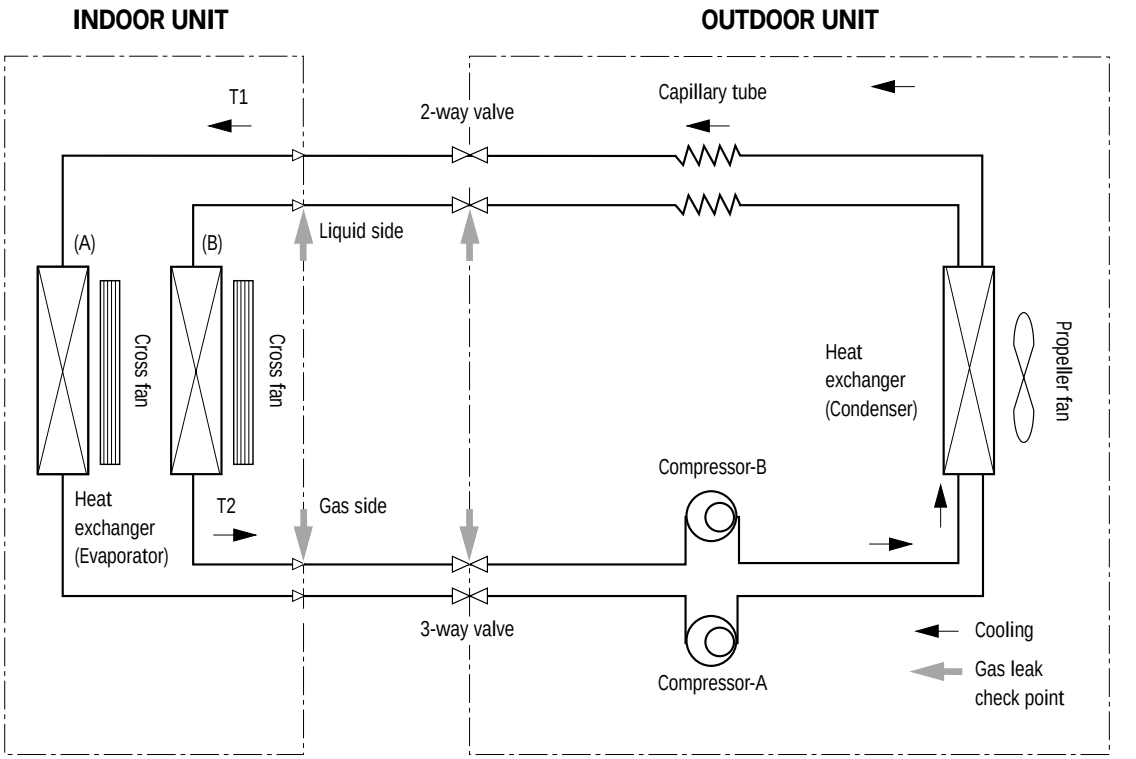
3-1. AD26A1C2 & AD18A1C2



Refrigerating cycle temperature and pressure

Operating Condition		STD Pressure (psi) 3-WAY V/V	Piping Temp.(°F)		Temp. Condition (°F)			
			T1	T2	Indoor		Outdoor	
					DB	WB	DB	WB
Cooling	Standard	57-71	50-54	50-54	80	67	95	75
	Max over load	-	61-64	61-64	80	67	115	75
	Low temp.	-	34-39	34-39	67	57	67	57
Heating	Standard	242-284	90-97	140-158	70	60	47	43
	Max over load	-	97-104	149-167	80	-	75	65
	Deice	-	82-90	104-113	70	60	35	33

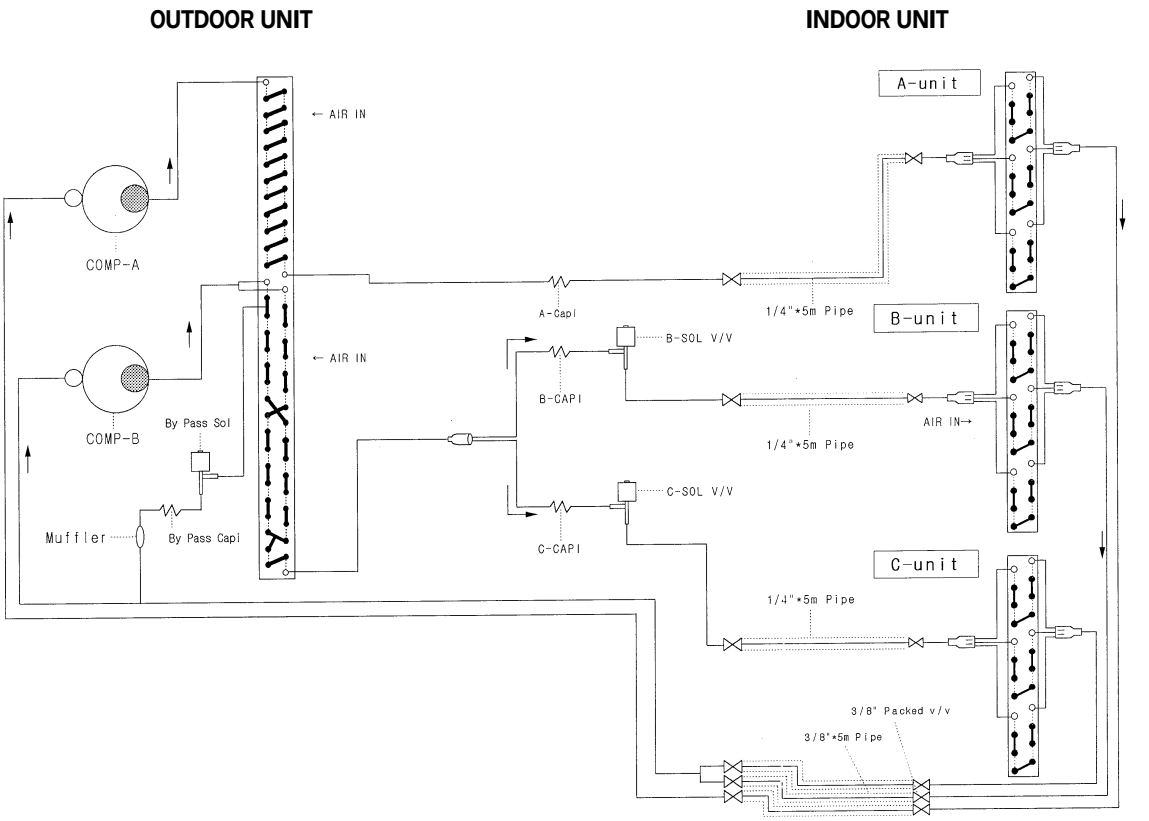
3-2. AM26A1C2 & AM18A1C2



Refrigerating cycle temperature and pressure

Operating Condition		STD Pressure (psi) 3-WAY V/V	Piping Temp.(°F)		Use Temp. Condition (°F)			
			T1	T2	Indoor		Outdoor	
					DB	WB	DB	WB
Cooling	Standard	64~78	50~54	50~54	80	67	95	75
	Max over load	-	61~64	61~64	80	67	115	75
	Low temp.	-	34~39	34~39	67	57	67	57

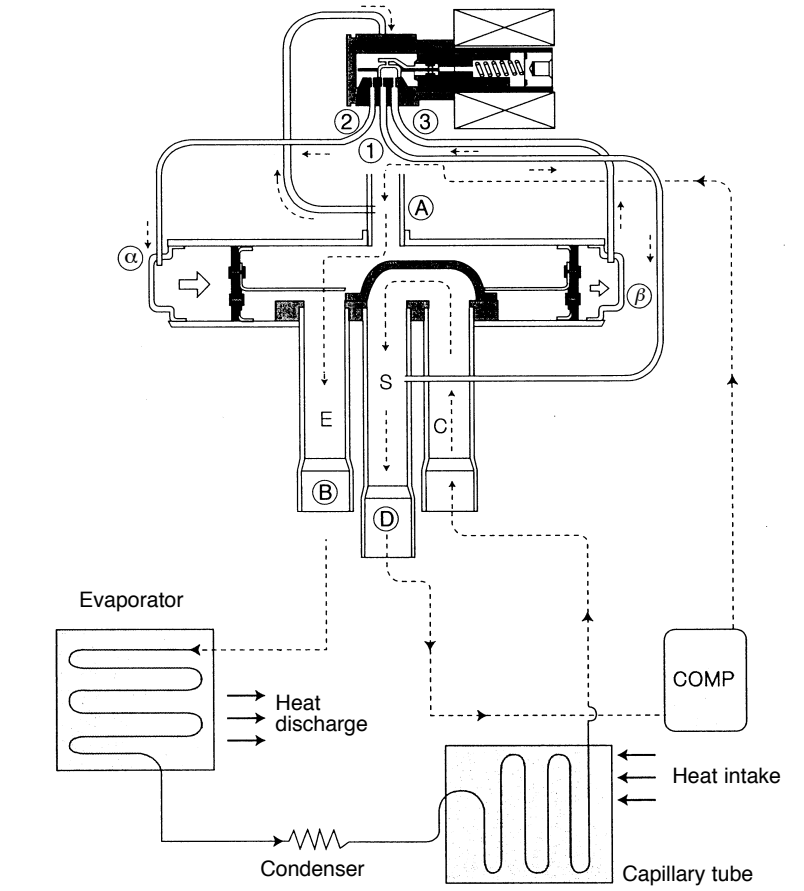
3-3. AM27A1C3



Refrigerating cycle temperature and pressure

Operating Condition		STD Pressure (psi) 3-WAY V/V	Piping Temp.(°F)		Use Temp. Condition (°F)			
			T1	T2	Indoor		Outdoor	
					DB	WB	DB	WB
Cooling	Standard	64~78	50~54	50~54	80	67	95	75
	Max over load	-	61~64	61~64	80	67	115	75
	Low temp.	-	34~39	34~39	67	57	67	57

4 4-way valve gas circulation schematic in heating operation



1. In heating operation, pull the needle valve by supplying the power (220V) to the solenoide.
2. In this time, the gas flow to ①, discharge to ① and intake α part of 4 way by the pipe connected Ⓓ part, and reverse the flow direction of compressor discharge gas by pulling the needle valve of inner.
3. The gas discharged in compressor flow to Ⓐ part of 4-way and the high temperature and pressure gas flow to evaporator by discharging to Ⓑ part so it is heated.
4. The gas discharged in evaporator reduce the pressure through the capillary tube, it is evaporate by flowing to condenser, flow to Ⓒ part of 4 way, and discharge to Ⓓ part so it is heated

8 Features & Operation

1 Operating Recommendations

Here are a few recommendations that you should follow when using your air conditioner.

Topic	Recommendation
Heating performances	The heat pump absorbs heat from outside air and brings it indoors. If the temperature of the outside air drops, the air conditioner will heat less. If you find that the room is not warm enough, use an additional heating appliance.
Warm air circulation	The air conditioner circulates warm air to heat your room; as a result, some time will be required after starting the air conditioner to warm the entire room. If necessary, set the air conditioner going a short time before you wish to use the room.
Frost	When outside temperatures are low and humidity is high, frost may form in the outdoor unit when heating with your air conditioner. If this happens: ◆ The heating operation is stopped. ◆ The Deice mode is triggered automatically for about seven minutes ◆ The OPERATION indicator on the indoor unit lights up red. No intervention is required from you; after about seven minutes, the air conditioner starts operating again normally.
High indoor and outdoor temperatures	If both the indoor and outdoor temperatures are high and you select the Heat mode, the outdoor unit's fan and compressor may stop at times. This is normal; simply wait until the air conditioner switches on again.
Power failure	If a power failure occurs when the air conditioner is operating, the unit is switched off. When the power returns, you must press ⏻ (On/Off) to restart it.

2 Temperature and Humidity Ranges

The following table indicates the temperature and humidity ranges within which the air conditioner can be used.

If the air conditioner is used at...	Then...
High temperatures	The automatic protection feature may be triggered and the air conditioner stopped.
Low temperatures	A water leakage or some other malfunction may happen if the heat exchanger freezes.
High humidity levels	Water may condense on and drip from the surface of the indoor unit if it is used for long periods.

Mode	Outdoor Temperature	Indoor Temperature	Indoor Humidity
Heating	32˚F to 75.2˚F approx.	80.6˚F or less	-
Cooling	69.8˚F to 109.4˚F approx.	64.4˚F to 909.6˚F approx.	80% or less
Drying	64.4˚F to 109.4˚F approx.	64.4˚F to 89.6˚F approx.	-

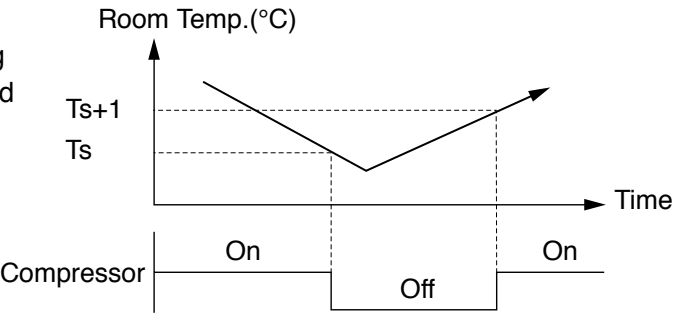
✳ **If the heating operation is used at below 32˚F(outdoor temperature) then, does not a full capacity.**

If the cooling operation is used at over 91.4˚F(indoor temperature) then, does not a full capacity.

3 Operation Characteristics for single type

3-1. Cooling Mode Operation

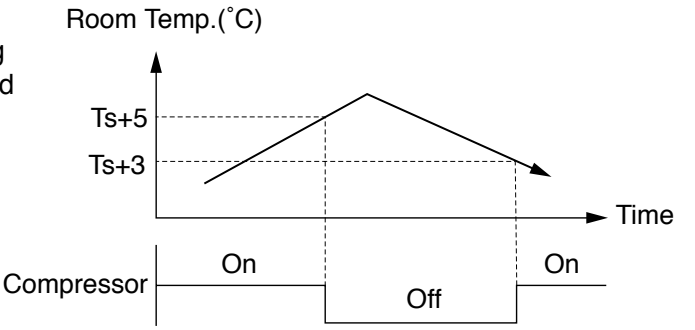
When selecting the Cooling Mode Operation, the unit will operate according to the setting by the remote controller and the operation is as well as the following. Room temperature can be set in 1˚C steps in the range of 18˚C to 30˚C.



◆ Ts means Remote Controller setting Temperature

3-2. Heating Mode Operation

When selecting the Heating Mode Operation, the unit will operate according to the setting by the remote controller and the operation is as well as the following. Room temperature can be set in 1˚C steps in the range of 18˚C to 30˚C.



3-3. Automatic Operation

When Automatic operation is set by the remote controller, the air conditioner senses the room temperature then automatically selects the operation mode and setting temperature.

	Operating Mode	Setting Temp.	Remarks
Room Temp ≥ 21˚C + ΔT	Cooling	Tsp = 24˚C + ΔT	ΔT = -2, -1, 0, 1, 2
Room Temp < 21˚C + ΔT	Heating	Tsp = 22˚C + ΔT	

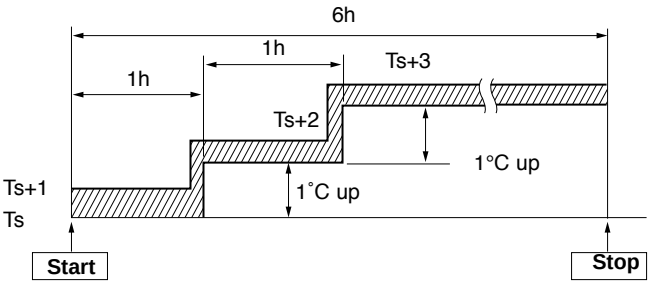
◆ In case that Room Temp. ≥ 21˚C + ΔT, The Unit is operated in the Cool Mode.
◆ In case that Room Temp. < 21˚C + ΔT, The Unit is operated in the Heat Mode.
◆ ΔT means that user is able to change setting temperature within ±2˚C.

3-4. Sleeping Operation

AT COOLING MODE

When you set the sleep mode, the following movement will start to avoid overcooling.

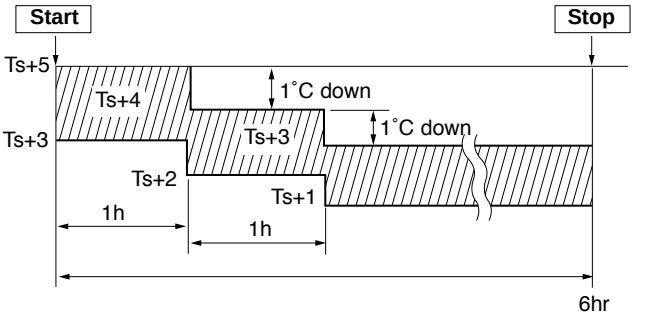
- ◆ The indoor fan speed is fixed by setting the remote controller.
- ◆ The setting temperature will rise by 1˚C at the starting of operation and by 1˚C one hour later.
- ◆ The operation will stop after 6 hours.



AT HEATING MODE

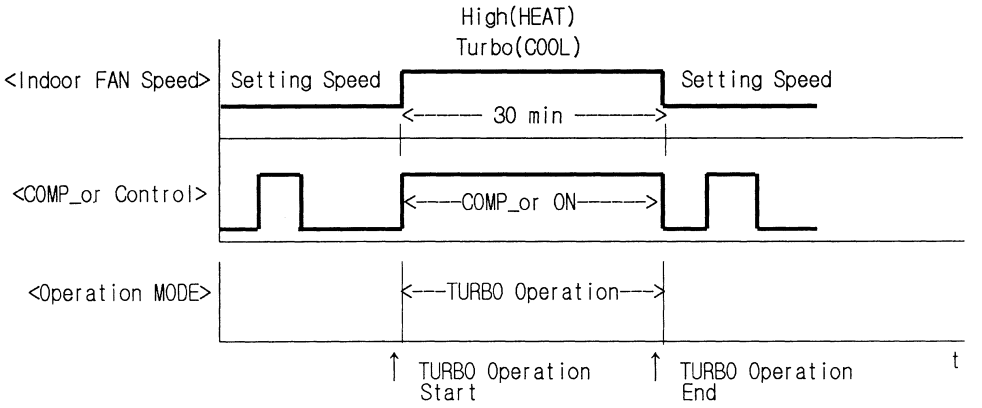
When you set the sleep mode, the following movement will start to avoid overheating.

- ◆ The indoor fan speed is fixed by setting the remote controller.
- ◆ The setting temperature will be dropped by 1˚C at the starting of operation and by 1˚C one hour later.
- ◆ The operation will stop after 6 hours.



3-5. Turbo Operation(Cooling or Heating Mode)

If turbo operation is selected during heating or cooling mode, compressor is operated for 30 minutes regardless of room temperature. After 30minutes of turbo operation unit will operate in normal state.



3-6. Indoor fan control in the heating mode

Indoor fan is controlled depending on the temperature of indoor heat exchanger in the heating mode.

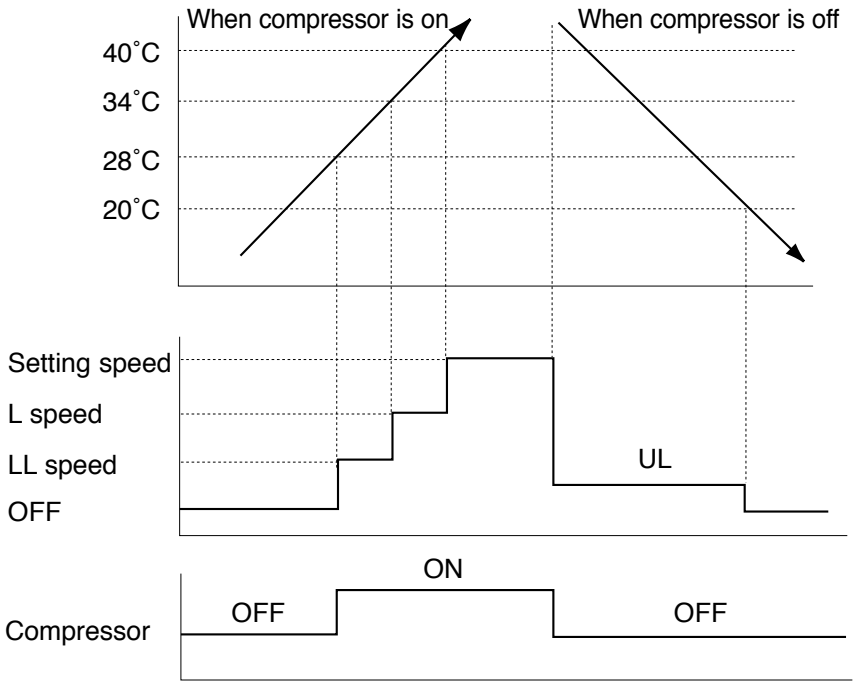
INDOOR FAN CONTROL

◆ **When compressor begins operating**

The temperature of indoor heat exchanger	Indoor fan speed
below 28˚C	off
28˚C ~ below 34˚C	LL speed
34˚C ~ below 40˚C	L speed
above 40˚C	setting speed

◆ **When compressor stops operating**

The temperature of indoor heat exchanger	Indoor fan speed
above 20˚C	UL speed
below 20˚C	off
after 10 minutes when compressor stops operating	off

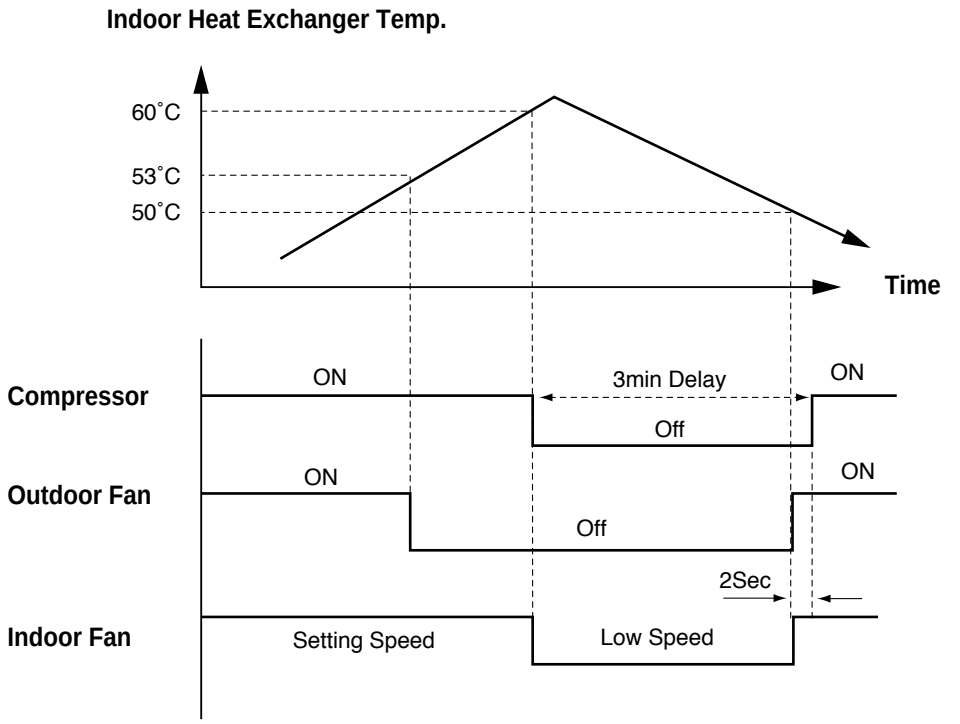


3-7. Overload protection control

AT HEATING MODE

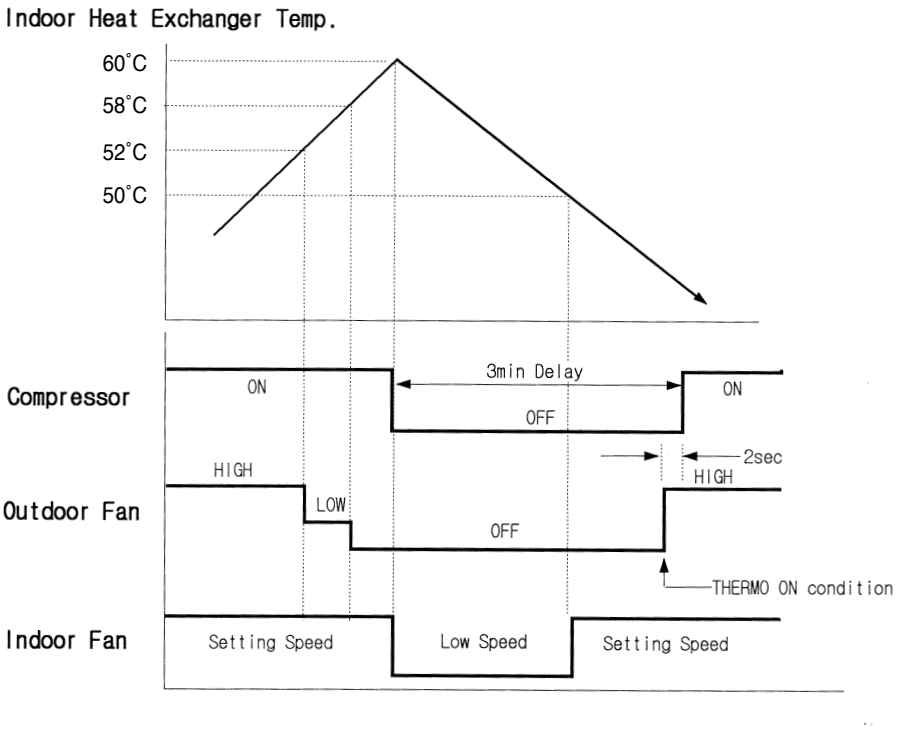
● **7K/ 9K/ 12K**

- ◆ If indoor heat exchanger temp. is over 53˚C, outdoor fan turns off.
- ◆ If indoor heat exchanger temp. is over 60˚C, outdoor compressor stops and Indoor fan speed is low.
- ◆ After compressor and fan are off if indoor heat exchanger temp. is below 50˚C, indoor fan and outdoor compressor and outdoor fan operate normally.



● 18K/ 24K

- ◆ If indoor heat exchanger temp. is over 52˚C, outdoor fan is low.
- ◆ If indoor heat exchanger temp. is over 56˚C, outdoor fan turns off.
- ◆ If indoor heat exchanger temp. is over 60˚C, outdoor compressor stops and Indoor fan speed is low.
- ◆ After compressor and fan are off if indoor heat exchanger temp. gets below 50˚C, indoor fan and outdoor compressor and outdoor fan operate normally.



3-8. Low Temp Release

AT COOLING MODE

● 7K/ 9K/ 12K

◆ First freezing protection

-If the temperature of indoor heat exchanger is below 2˚C for over 6minutes, the outdoor fan turns off.

-If the temperature of indoor heat exchanger increase over 5˚C during the first protection function, the first freezing protection function is released and the outdoor fan turns on.

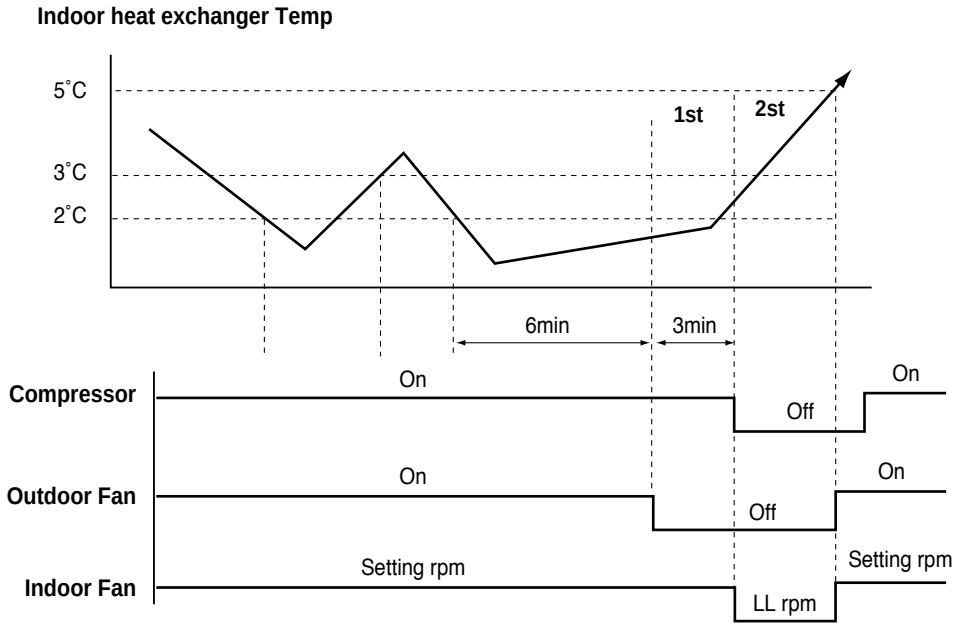
◆ Second freezing protection

-If the temperature of indoor heat exchanger does not increase over 5˚C in 3 minutes after First freezing protection, compressor turns off.

-If the temperature of indoor heat exchanger increase over 5˚C during the second protection function, the second freezing protection function is released and compressor operates normally after 10 minutes.

◆ If the temperature of indoor heat exchanger increase over 3˚C during 6 minutes countiong, 6 minutes counter is cleared.

◆ Operating Pattern



● 18K/ 24K

-If the temperature of indoor heat exchanger is below 5˚C, outdoor fan is low.

-If the temperature of indoor heat exchanger increase over 6˚C during the fan low, outdoor fan is high.

◆ First freezing protection

-If the temperature of indoor heat exchanger
is below 2˚C for over 3 minutes, outdoor fan turns off.

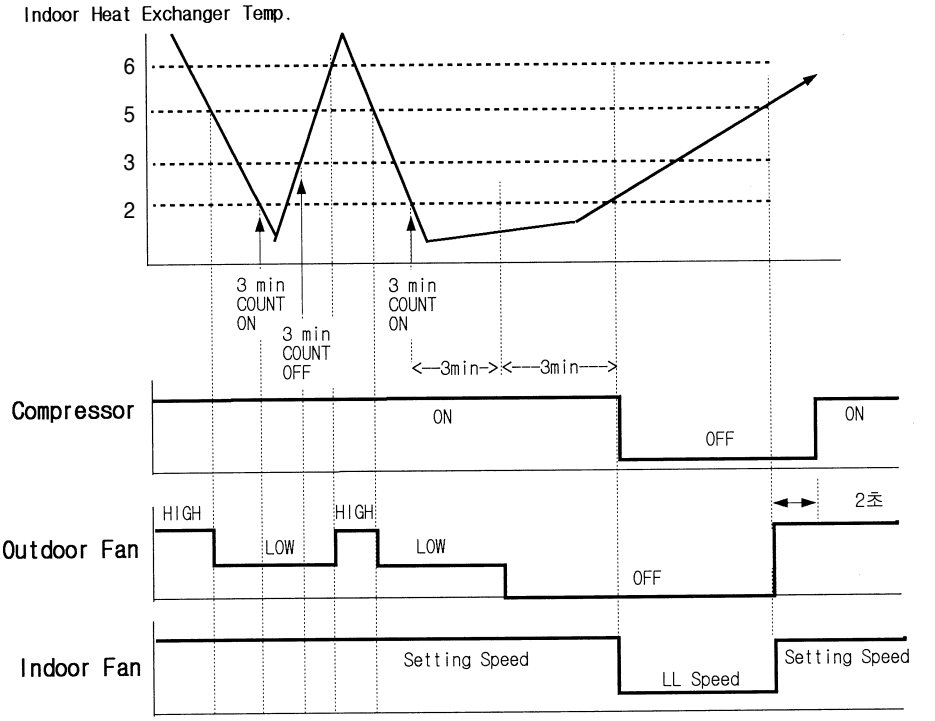
-If the temperature of indoor heat exchanger increase over 5˚C during the first protection function, the first freezing protection function is released and the outdoor fan turns on.

◆ Second freezing protection

-If the temperature of indoor heat exchanger does not increase over 5˚C in 3 minutes after First freezing protection, compressor turn off and indoor fan is “LL”speed.
-If the temperature of indoor heat exchanger increase over 5˚C during the second protection function, the second freezing protection function is released and compressor operates normally after 10 minutes.

◆ If the temperature of indoor heat exchanger increase over 3˚C during 3 minutes counter is cleared.

◆ Operating Pattern



3-9. Defrost control

Defrost operation is controlled by sensing the temperature of indoor heat exchanger

◆ **How to sense defrost conditions**

A condition

The temperature of indoor heat exchanger is checked in intervals of 1 minute. In case the temperature of indoor heat exchanger drops more than 0.5˚C for 6 minutes, it is considered as one cycle. If it happens 3 times continuously, It is said that " A condition" is satisfied.

B condition

If the temperature of indoor heat exchanger is below about 40˚C when the compressor is on, it is considered as defrost "B condition"

C condition

When the accumulating time of compressor ON is over 20 minutes.

D condition

When the accumulating time of compressor ON is over 3Hr.

E condition

When operating time of compressor without stopping is over 6 minutes.

F condition

If the compressor is off(thermo off) when the temperature of indoor heat exchanger is below about 46˚C, it is considered as one cycle.
If it happens 2 times continuously, It is said that "F condition" is satisfied.

G condition

When the accumulating time of compressor ON is over 90 minutes.

◆ **Defrost operation conditions**

A×**B**×**C** condition or

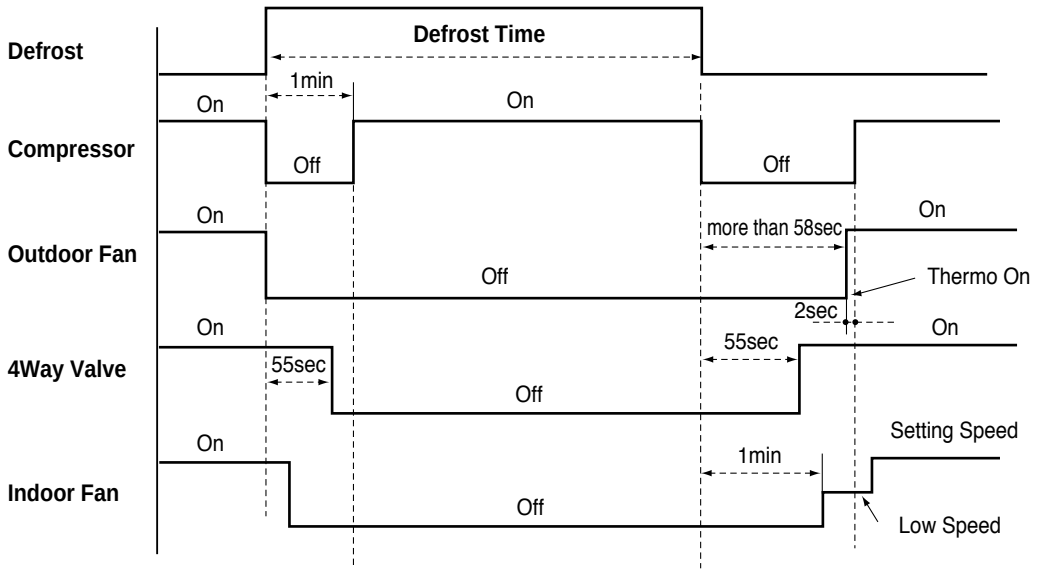
B×**D**×**E** condition

F×**G** condition

Defrost time : 5~8 minutes

◆ **Operation pattern**

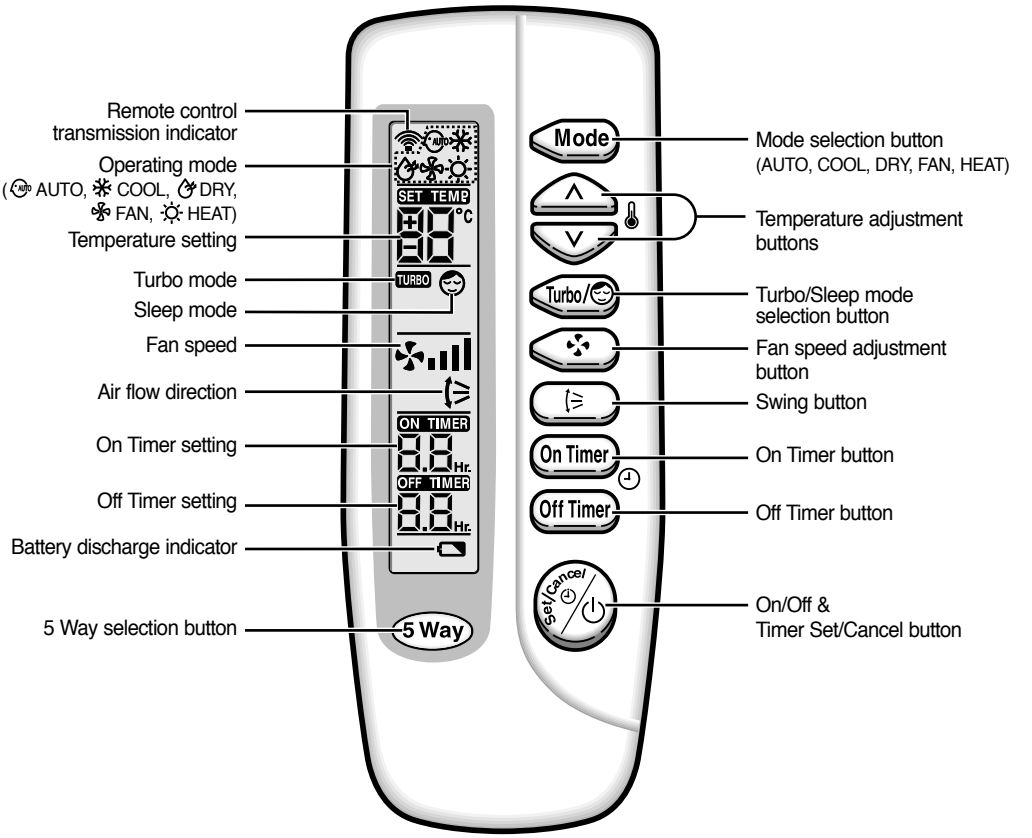
◆ **Operation pattern**



3-10. The others

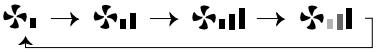
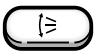
Time delay safety control
The compressor is stopped for 3minutes to balance the pressure in the refrigeration cycle. (protection of compressor)

3-11. Remote Control - Buttons and Display



● Feature and operation

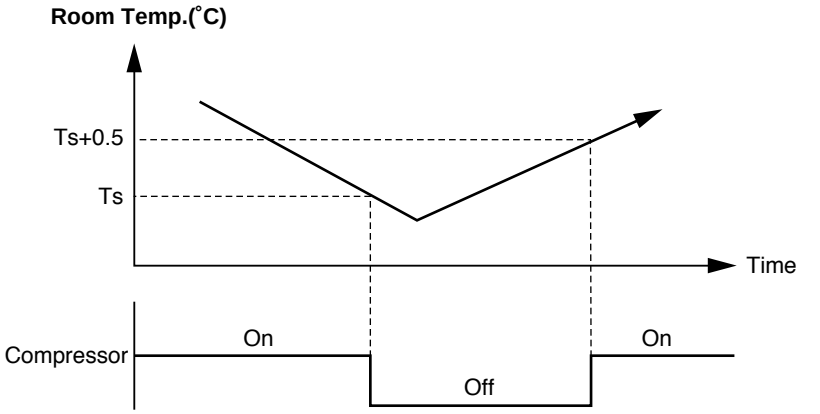
♦ Name & Function of Key in remote controller

NO	NAMED OF KEY	FUNCTION OF KEY
1		Power On/Off button to start and stop airconditioner or timer set up
2	(UP)	Temp. up button. To increase the temperature by the pressing the temperature button
	(DOWN)	Temp. down button. To decrease the temperature by the pressing the temperature button
3		Each time you press this button Mode is changed in the following order : Auto Mode : Fan Only : Cool Mode : Heat Mode : Dry Mode
4		Press TURBO until the appearance. the air condition cools or heats the room as quickly as possible. after 30minutes, the airconditioner is reset automatically to the previous mode
		Press until the appearance. the sleep timer can be used when you are cooling or heating your room to switch the air conditioner off automatically after a period of six hours.
5		Each time you press this button, FAN SPEED is changed in the following order. 
6		Adjust air flow vertically.
7		The ON Timer enables you to **switch on** the air conditioner automatically after a given period of time that is from 30 minutes to 24 hours. To cancel the On Time, press the (Set/Cancel) button.
8		The Off Timer enables you to **switch off** the air conditioner automatically after a given period of time that is from 30 minutes to 24 hours. To cancel the On Time, press the (Set/Cancel) button.
9		To select the 5 way function with the remote control, press the 5 way button one or more times until the desired mode is selected.. Each time you press the 5 way button Each 5 way indicator on the indoor unit comes on order.

4 Operation Characteristics

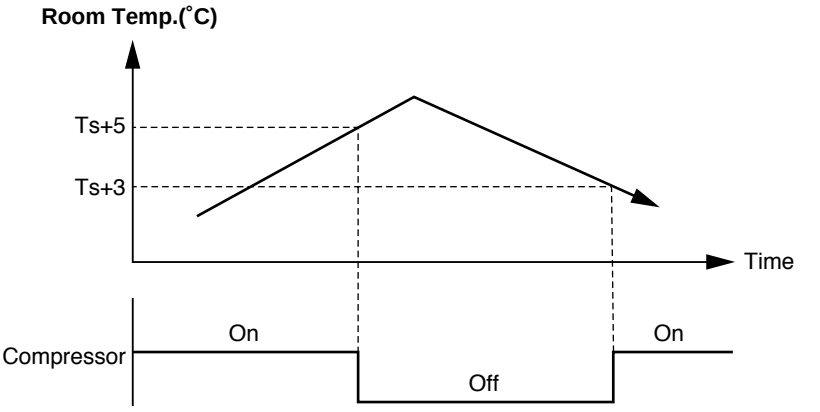
4-1. Cooling Mode Operation (AD✳✳A1C✳/AM✳✳A1✳)

When selecting the Cooling Mode Operation, the unit will operate according to the setting by the remote controller and the operation is as well as the following. Room temperature can be set in 1˚C steps in the range of 18 to 30˚C.



4-2. Heating Mode Operation (AD✳✳A1C2)

When selecting the Heating Mode Operation, the unit will operate according to the setting by the remote controller and the operation is as well as the following. Room temperature can be set in 1˚C steps in the range of 16 to 30˚C.



4-3. Automatic Operation (AD✳✳A1C✳/AM✳✳A1C✳)

When Automatic operation is set by the remote controller, the air conditioner senses the room temperature then automatically selects the operation mode and setting temperature.

Standard Setting Temp.	Operating Mode	Setting Temp.	Remarks
Tsp = 21˚C +ΔT	Cooling	Tsp = 24˚C + ΔT	ΔT = -2, -1, 1, 2
	Heating	Tsp = 22˚C + ΔT	

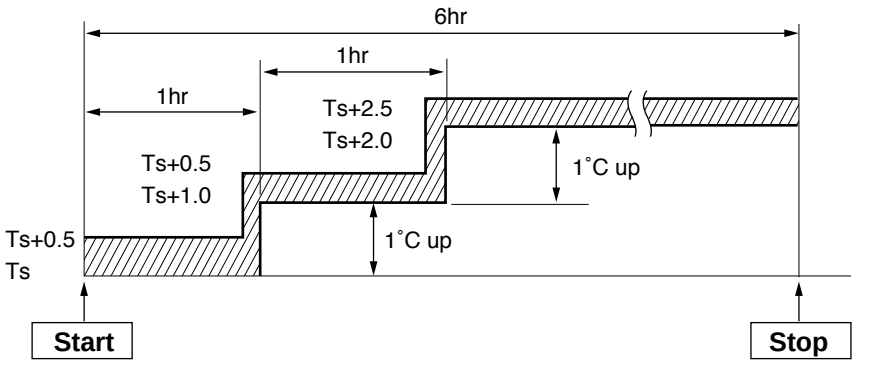
- ◆ In case that Room Temp. ≥ 21˚C + ΔT, The Unit is operated in the Cool Mode.
- ◆ In case that Room Temp. < 21˚C + ΔT, The Unit is operated in the Heat Mode.
- ◆ ΔT means that User is able to change setting temperature within ±2.

4-4. Sleeping operation

AT COOLING MODE (AD✳✳A1C✳/AM✳✳A1C✳)

When you set the sleep mode, the following movement will start to avoid overcooling.

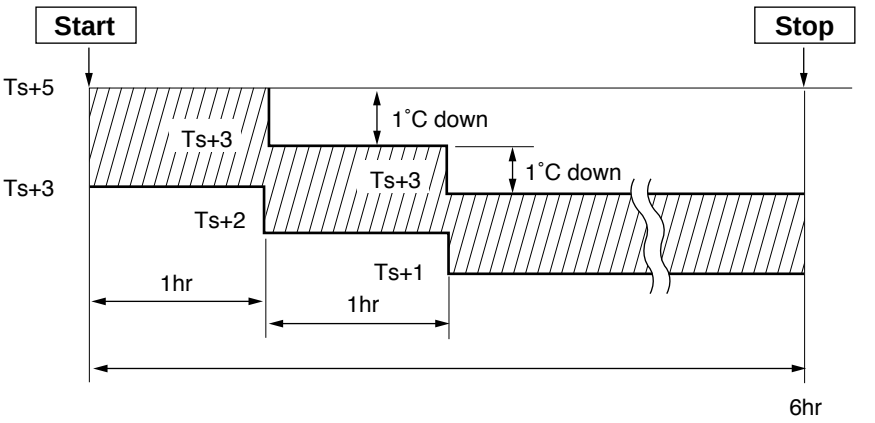
- ◆ The indoor fan speed is fixed by setting the remote controller.
- ◆ The setting temperature will rise by 1˚C at the starting of operation and by 1˚C one hour later.
- ◆ The operation will stop after 6 hours.



AT HEATING MODE (AD**A1C*)

When you set the sleep mode, the following movement will start to avoid overheating.

- ◆ The indoor fan speed is fixed by setting the remote controller.
- ◆ The setting temperature will be dropped by 1˚C at the starting of operation and by 1˚C one hour later.
- ◆ The operation will stop after 6 hours.



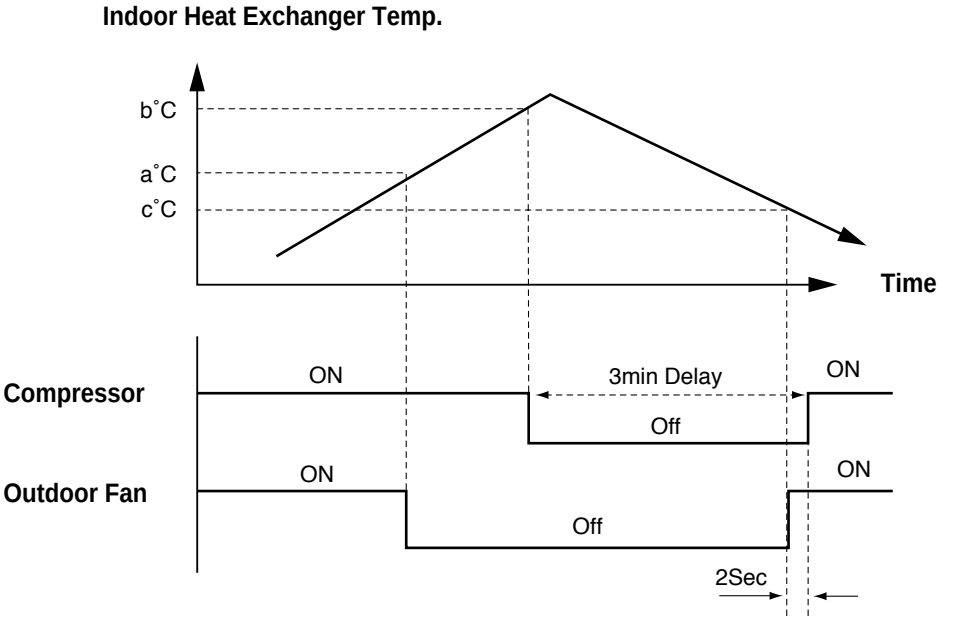
4-5. Turbo operation (Cooling or Heating Mode) (AD**A1C*/AM**A1C*)

If turbo operation is selected during heating or cooling mode, compressor is operated for 30 minutes regardless of room temperature.
After 30 minutes of turbo operation unit will opate in normal state.

4-6. Overload Protection Control

AT HEATING MODE (AD**A1C*)

- ◆ If indoor heat exchanger temp. is over a˚C, outdoor fan turns off.
- ◆ If indoor heat exchanger temp. is over b˚C, outdoor compressor stops and Indoor fan speed is low.
- ◆ After compressor and fan are off if indoor heat exchanger temp. is below 50˚C, indoor fan and outdoor compressor and outdoor fan operate normally.



Model Name	a˚C	b˚C	c˚C
AD**A1C*	56	63	50

AT COOLING MODE (AD**A1C*/AM**A1C*)

If the temperature of compressor top is above about 130˚C, each compressor is controlled by its OLP(over load protector) attached on the top of compressor to protect compressor coil from being damaged. The outdoor fan runs continuously regardless of compressor On/Off.

4-7. Defrost Control (AD✳✳A1C✳)

When the outdoor temperature is low, frost may gather on the outdoor heat exchanger coil. When this happens, the defrosting system operates.
The microprocessor in the outdoor unit monitors the temperature of odoor heat exchanger.
Each unit has its own the sensor located on the outdoor heat exchanger.

◆ **Defrost method : Reverse cycle**

◆ **How to sense defrost conditions**

The microprocessor in the outdoor unit reads the inclination of the outdoor heat exchanger temperature and operating time of compressor.

A condition

The temperature of outdoor heat exchanger is checked in intervals of 1 minute. In case the temperature of indoor heat exchanger drops more than 0.5˚C for 6 minutes, it is considered as one cycle. If it happens 3 times continuously, it is said that “A condition” is satisfied.

B condition

If the temperature of outdoor heat exchanger is below -3˚C when the compressor is on, it is considered as defrost “B condition”
(If the temperature of the outdoor heat exchanger is over -3˚C, the data which has been read up to now is cleared.)

C condition

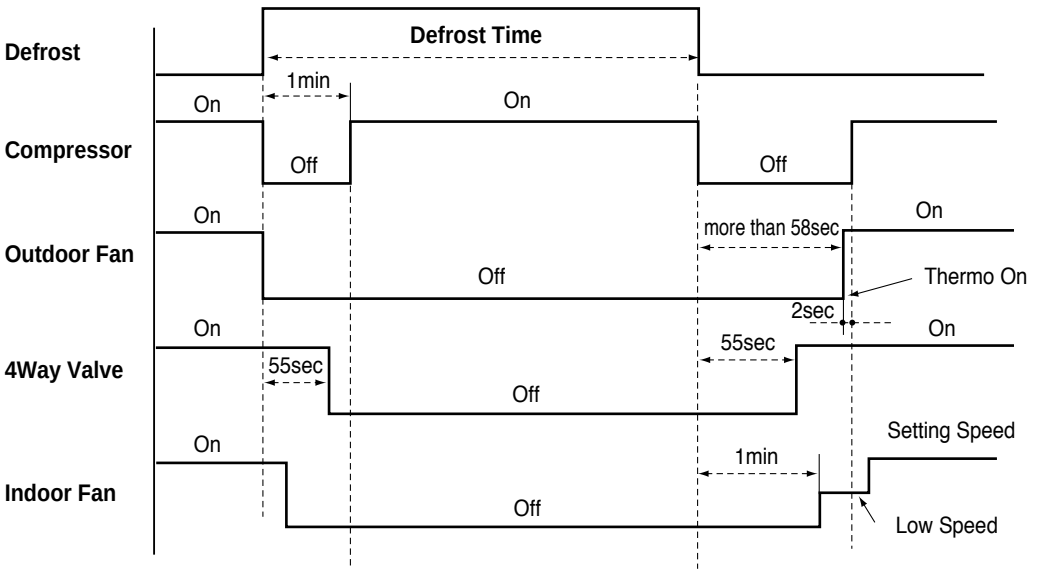
When the accumulating time of compressor ON is over 20 minutes.

D condition

When the operating time of compressor ON is over 100 minutes.

◆ **Defrost operation conditions**
A×**B**×**C** condition or
B×**D** condition

◆ **Operating Pattern**



◆ **The condition for stopping defrost operation**

When the temperature of the outdoor heat exchanger is over 20˚C or when the oepration time in the cool mode is over for 10 minutes.

◆ **In case that 2 indoor units are operating**

In case of 2 units oper of both units is under defrost condition, the other unit is also operating under defrost in order to prevent normal unit from being iced by defrost unit.

4-8. Freezing Protection Control (In the Cool Mode)

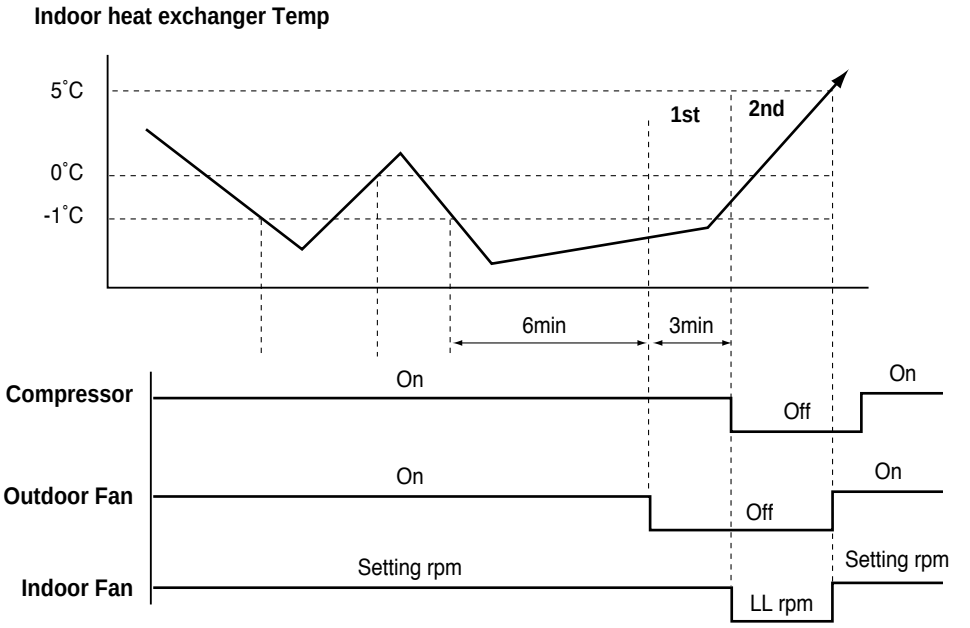
Freeze prevention keeps the indoor heat exchanger coil from freezing.
Freezing reduces the efficiency of the unit, and frost buildup on the coil be indoor unit's fan.

◆ **First freezing protection**
If the temperature of indoor heat exchanger is below -1˚C for over 6 minutes, the outdoor fan turns off.

◆ **Second freezing protection**
If the temperature of indoor heat exchanger does not increase over 5˚C in 3 minutes after first freezing protection, compressor turns off.

- If the temperature of indoor heat exchanger increase over 5˚C during the protection function, the freezing protection function is released and compressor operates normally.
- If the temperature of indoor heat exchanger increase over 0˚C during 6 minutes counting, 6minutes counter is cleared.

◆ **Operating Pattern**

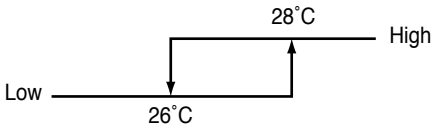


4-9. Outdoor fan speed control

- To optimize the performance of air conditioner, the outdoor fan speed is selected automatically according to the outside temperature.
- Note that in both cooling mode and heating mode, the fan comes on at first at high speed for 5 seconds. Since outdoor conditions sometimes make it difficult for the fan to start, this sudden surge of power may be necessary.

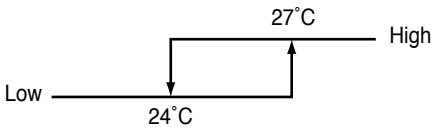
① In Cool Mode

[AD✻✻A1C✻ / AM27A1C3]



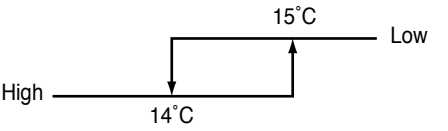
Outside temperature ≧ 28˚C → High rpm
Outside temperature ≦ 26˚C → Low rpm

[AM26C18JA1C2]



Outside temperature ≧ 27˚C → High rpm
Outside temperature ≦ 24˚C → Low rpm

② In Heat Mode



Outside temperature ≧ 15˚C → Low rpm
Outside temperature ≦ 14˚C → High rpm

③ In mixing operation Cool and Heat Mode

Outdoor fan rpm is always low regardless of outdoor temperature.

4-10. Solenoid Valve Control 1 (AM27A1C, 2Comp + 3Room Cooling Only)

The NUMBER OF OPERATION	UNITS	B-SOL V/V	C-SOL V/V	BY PASS SOL
1 UNIT	A	OFF	OFF	OFF
	B	ON	OFF	ON
	C	OFF	ON	ON
2 UNIT	A+B	ON	OFF	ON
	A+C	OFF	ON	ON
	B+C	ON	ON	OFF
3 UNIT	A+B+C	ON	ON	OFF

✻ Note

1) In case on of both B and C unit is operating, by pass solenoid valve is always ON.

4-11. Balancing pressure (AM27A1C3, 2Comp + 3Room Cooling Only)

In case that valves of the unit which has kinds of valve(solenoid valve or expansion valve etc.) should be opend for a few minutes for balancing pressure after stopping operating.

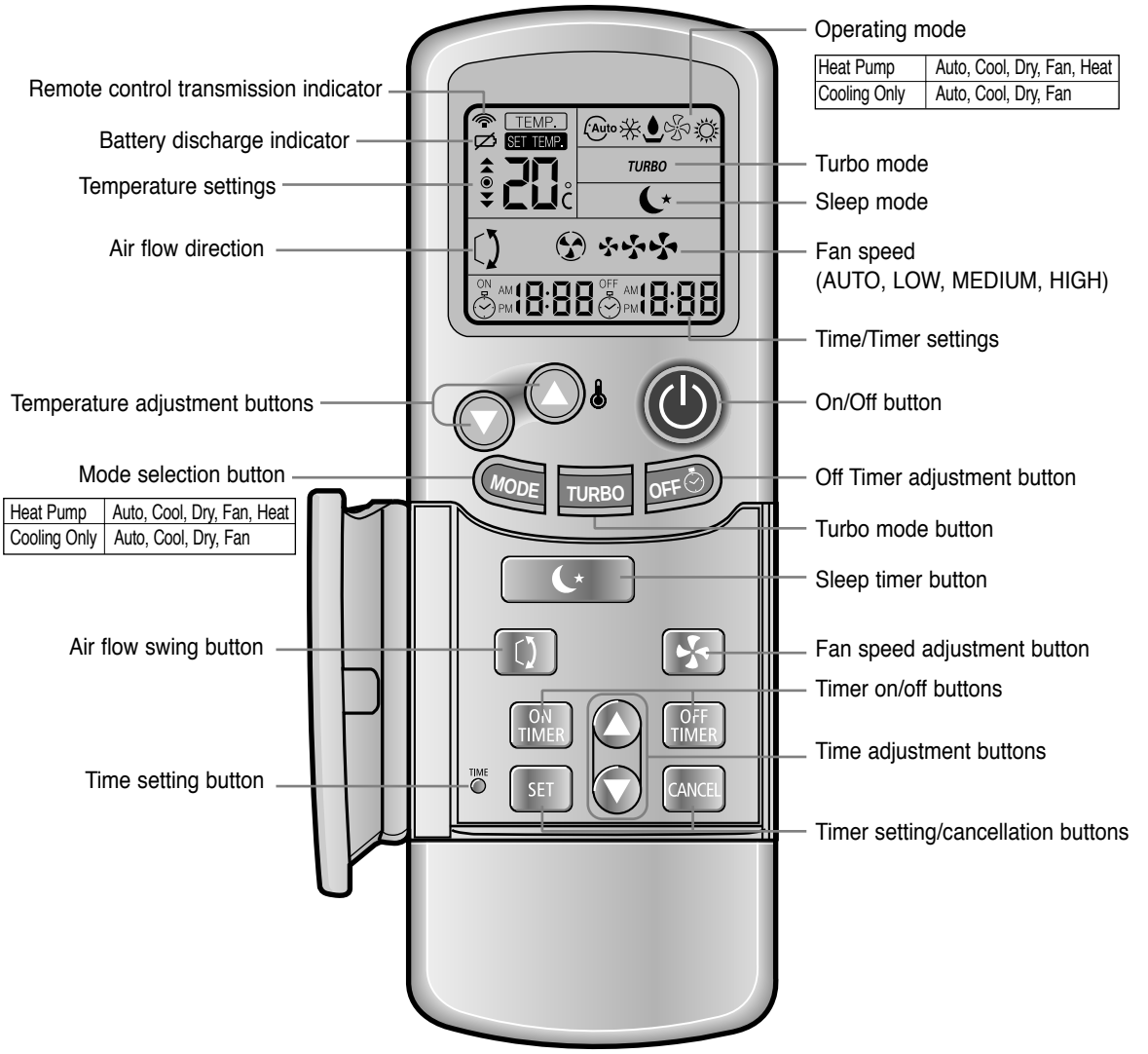
① In case of A unit
Pressure balance is made in nature through capillary tube because there are no valves in the system.

② In case of B and C unit
By pass solenoid valve is opened for 100 seconds after both units stop operating.

4-12. The others

Time delay safety control
The compressor is stopped for 3 minutes to balance the pressure in the refrigeration cylce.(protection of compressor)

4-13. Remote Control Buttons and Display



● Features and Operation

♦Name & Function of Key in Remote Controller

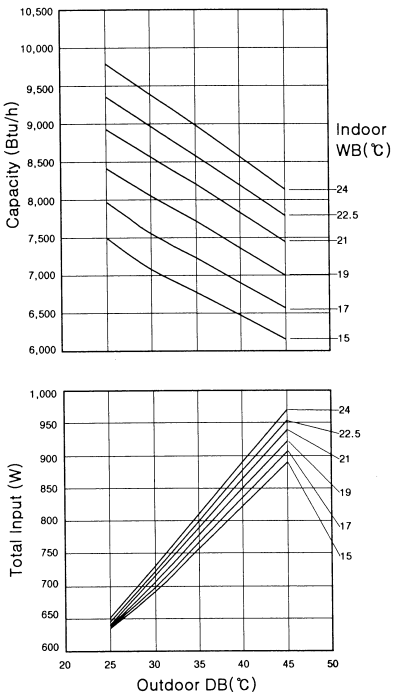
Named of Key		Function of Key
⏻		On/Off Button. Use this button to start and stop air conditioner.
🌡	▲ (UP)	Temp. up button. If the ▲ button is pressed once, the setting temperature is increased by 1°C
	▼ (DOWN)	Temp. down button. If the ▼ button is pressed once, the setting temperature is decreased by 1°C
MODE		Each time you press this button, MODE is changed in the following order. Auto : Auto Mode : Fan Only Mode : Cool Mode : Heat Mode : Dry Mode <Heat Pump> Auto → ❄ → 💧 → 🌀 → ☀ <Cooling Only> Auto → ❄ → 💧 → 🌀
TURBO		Use this button to provide heavy duty cooling & Heating for 30 minutes.
OFF ⏲		Set up the reserve or cancel the timer on and timer off quickly
☾★		Use this button for sleep operation. (The SLEEP mode can be selected at COOL and HEAT mode.)
↕		Adjust air flow vertically.
🌀		Each time you press this button, FAN SPEED is changed in the following order. → → → →
TIMER	ON TIMER	Set up the time that operation start.
	OFF TIMER	Set up the time that operation stop.
	SET	Use this button to reserve the timer on.
	CANCEL	Use this button to reserve or cancel the timer on and timer off.
	▲ (UP)	If the ▲ button is pressed once, the time increases by one minute during the time set mode, and ten minutes during the timer set mode.
	▼ (DOWN)	If the ▼ button is pressed once, the time decreases by one minute during the time set mode, and ten minutes during the timer set mode.
	TIME	Without regard to ON/OFF condition in remote controller, use this button to set current time. Adjust the current time using ▲▼ button. (Data can be transmitted after setting up the time)

9 Cooling & Heating characteristics Data

1 Split Type

7,000BTU

<Cooling>



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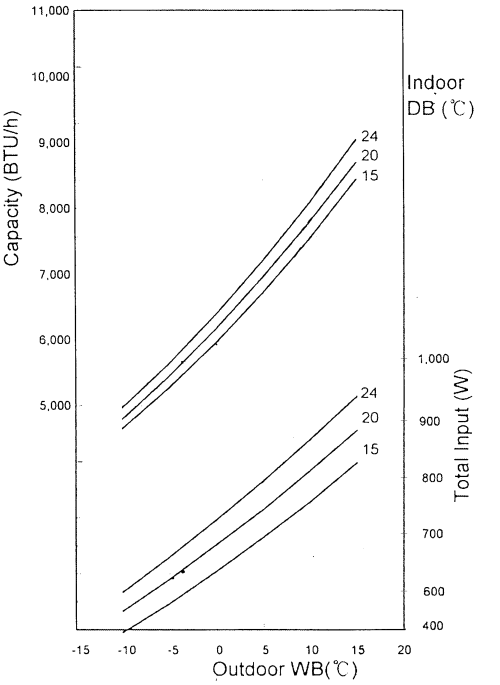

9,000BTU

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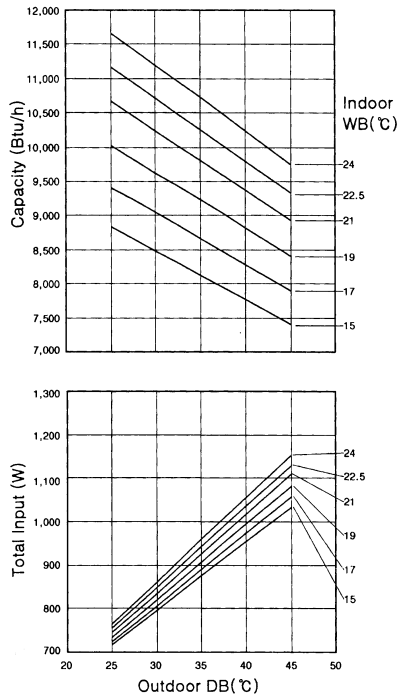
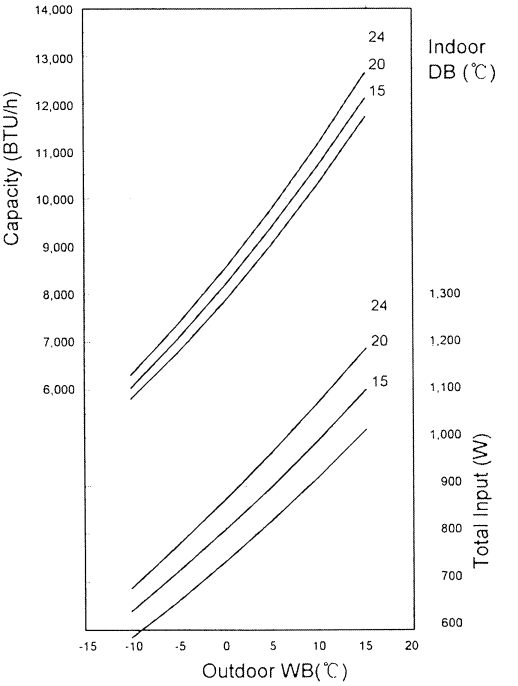


<Heating>



12,000BTU

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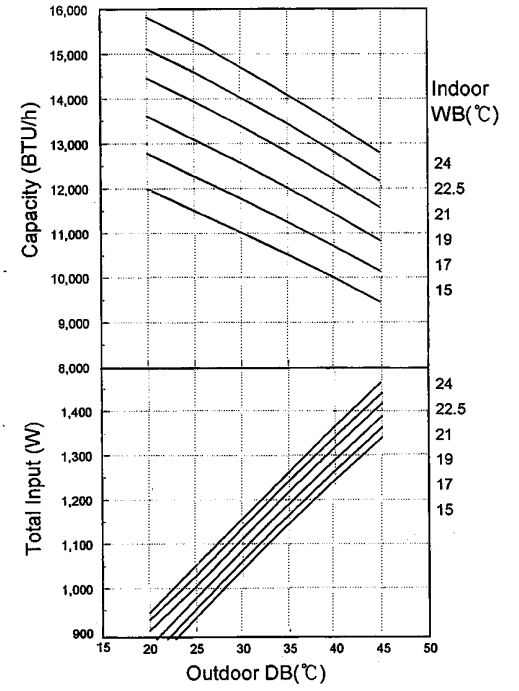

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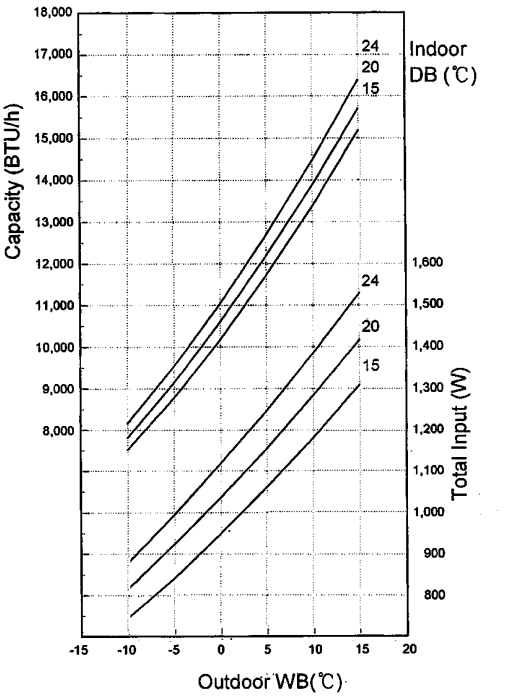

18,000BTU

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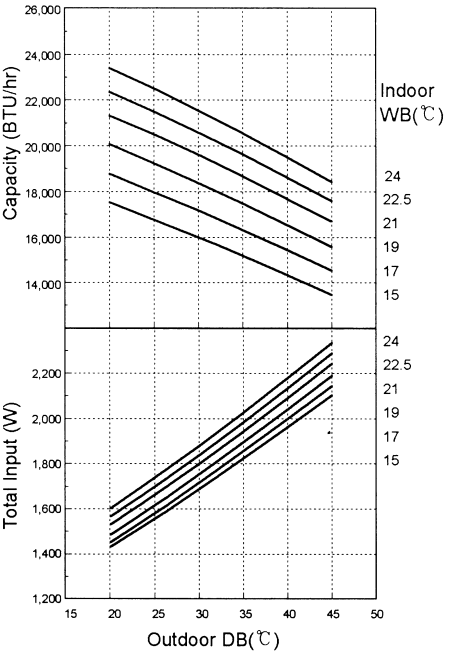
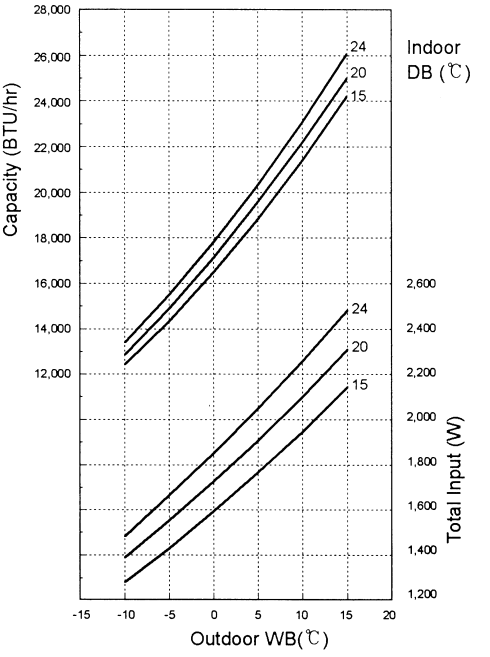


<Heating>



24,000BTU

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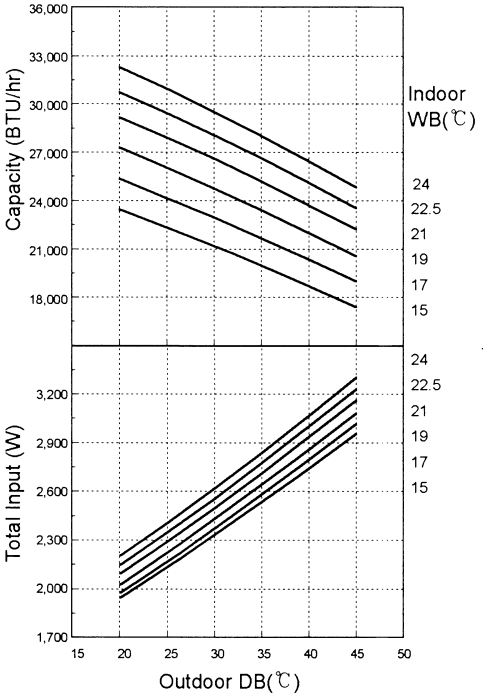
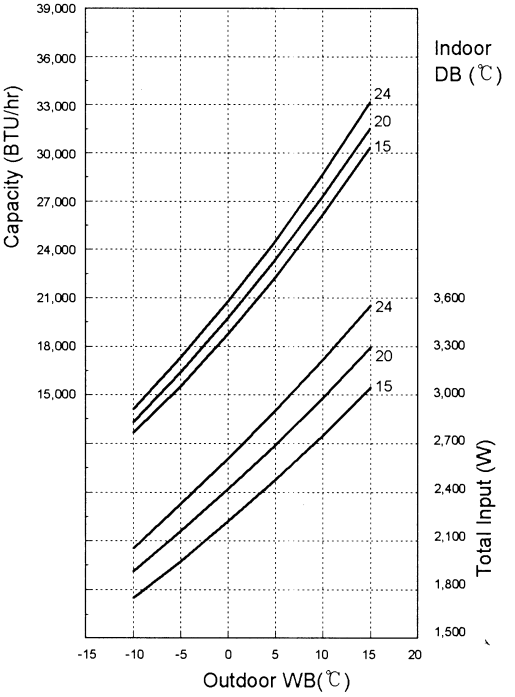
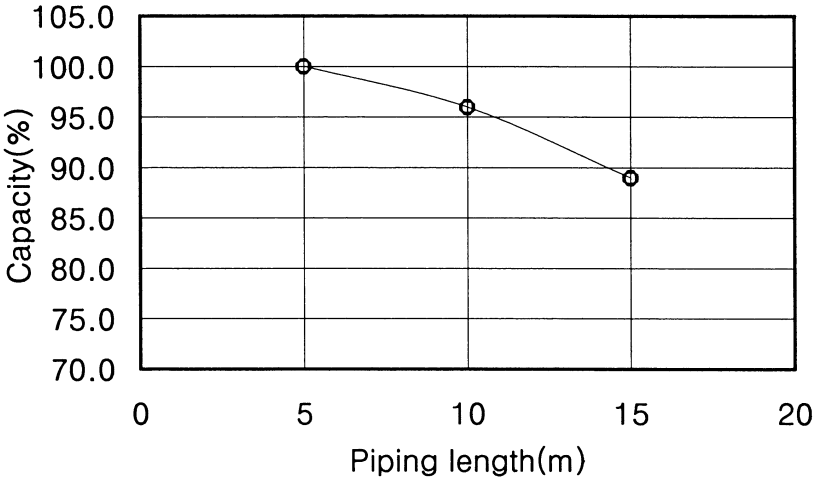
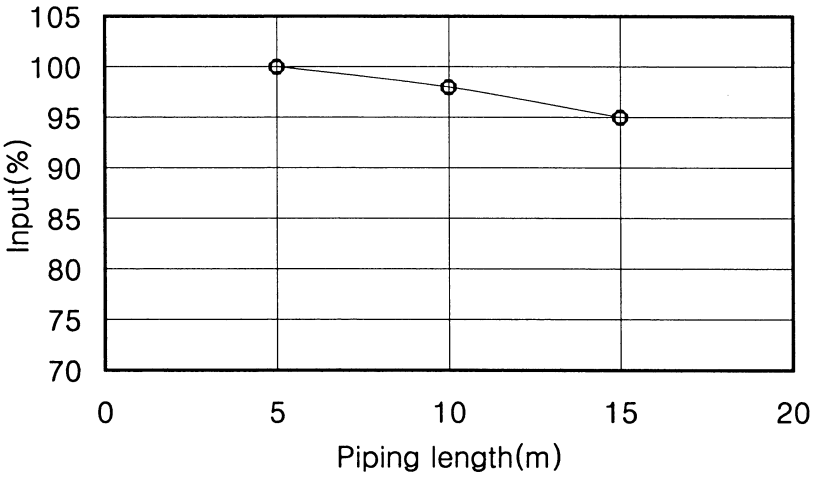


<Heating>



2 Capacity





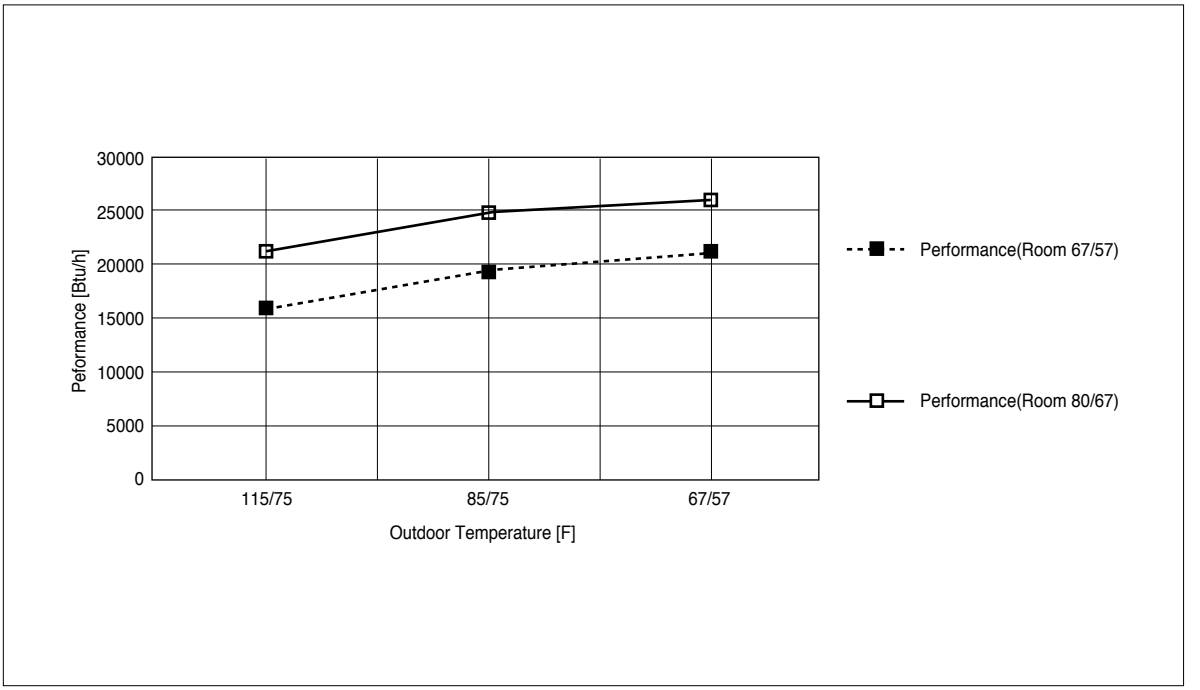
If the piping length exceed more than 5m,
add 20g of refrigerant per meter should be added for 7k and 9k models.
add 30g of refrigerant per meter should be added for 12k and 18k models.
add 40g of refrigerant per meter should be added for 24k models.

3 Multi Type

1. Cooling Characteristics

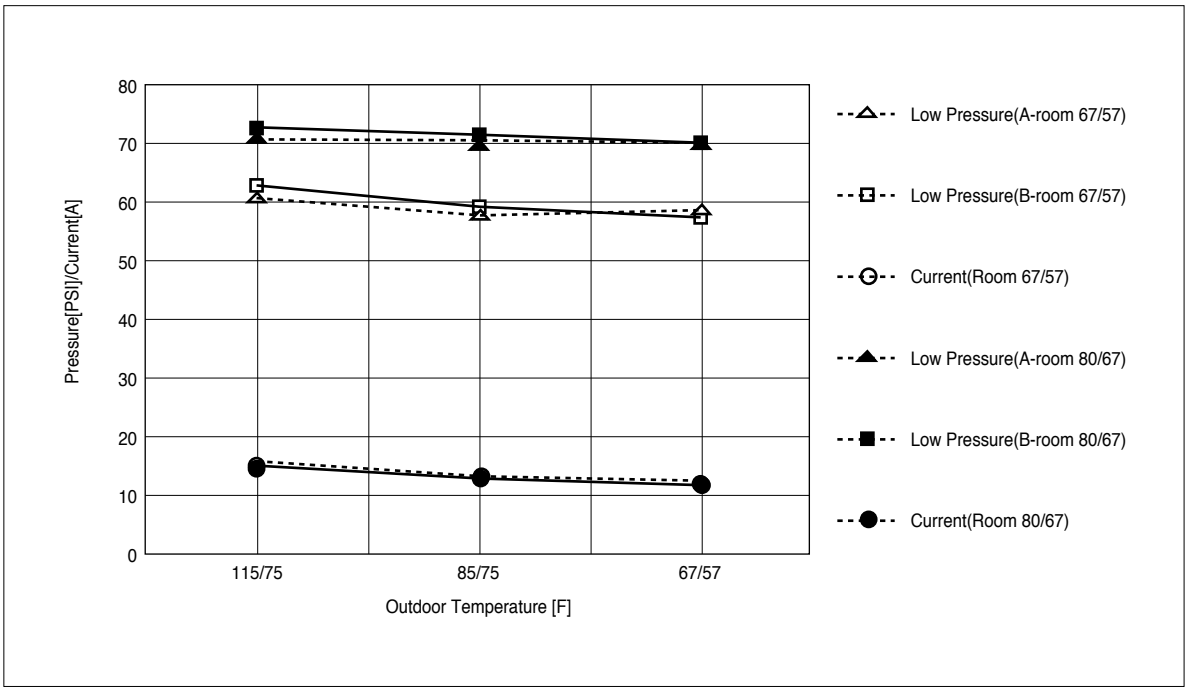
[1] Cooling performance variation accordance with the outdoor temperature

OUTTEMP	COOLING	
	67/57	80/67
˚F	PERF	PERF
115/75	16215	21620
85/75	19615	24830
67/57	21794	26852



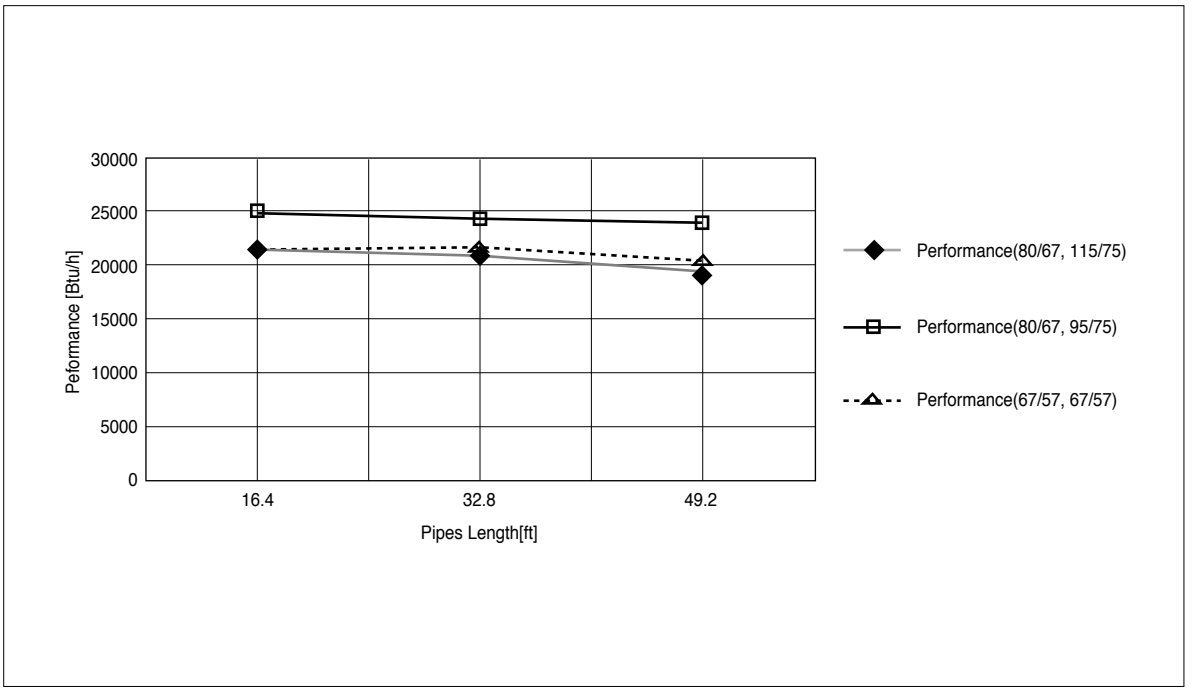
[2] Low pressure variation during the cooling operation

OUTTEMP	COOLING					
	67/57			80/67		
˚F	LP-A-room	LP-B-room	Current	LP-A-room	LP-B-room	Current
115/75	61.1	63.3	14.5	73.1	74.5	15
85/75	58.1	58.9	12.2	69.7	71.3	12.6
67/57	58.5	57.1	10.7	70.7	70.4	11.2



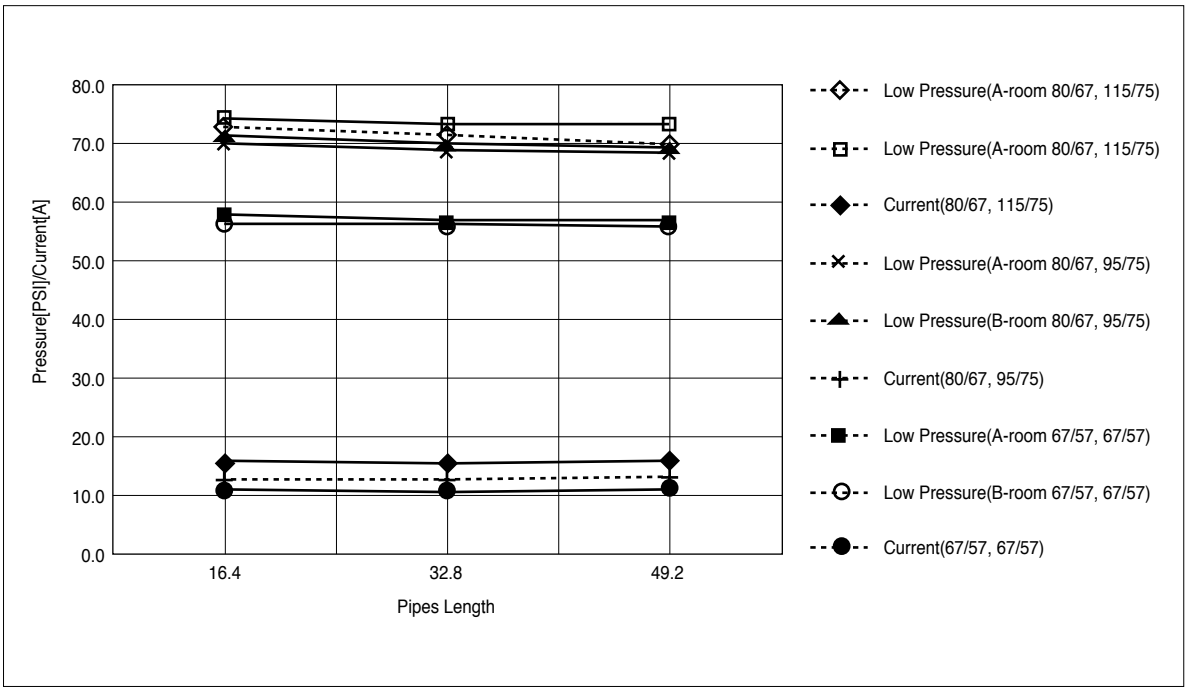
[3] Cooling Performance variation accordance with pipes line set & temperature condition

Pipe Length	80/67, 115/75	80/67, 95/75	67/57, 67/57
[ft]	Performance-Ovld.[Btu/h]	Performance-Std[Btu/h]	Performance-Low[Btu/h]
16.4	21620	24830	21794
32.8	20951	24612	21247
49.2	19383	23701	20208



[4] Low pressure & Current variation accordance with pipes line set & temperature condition.

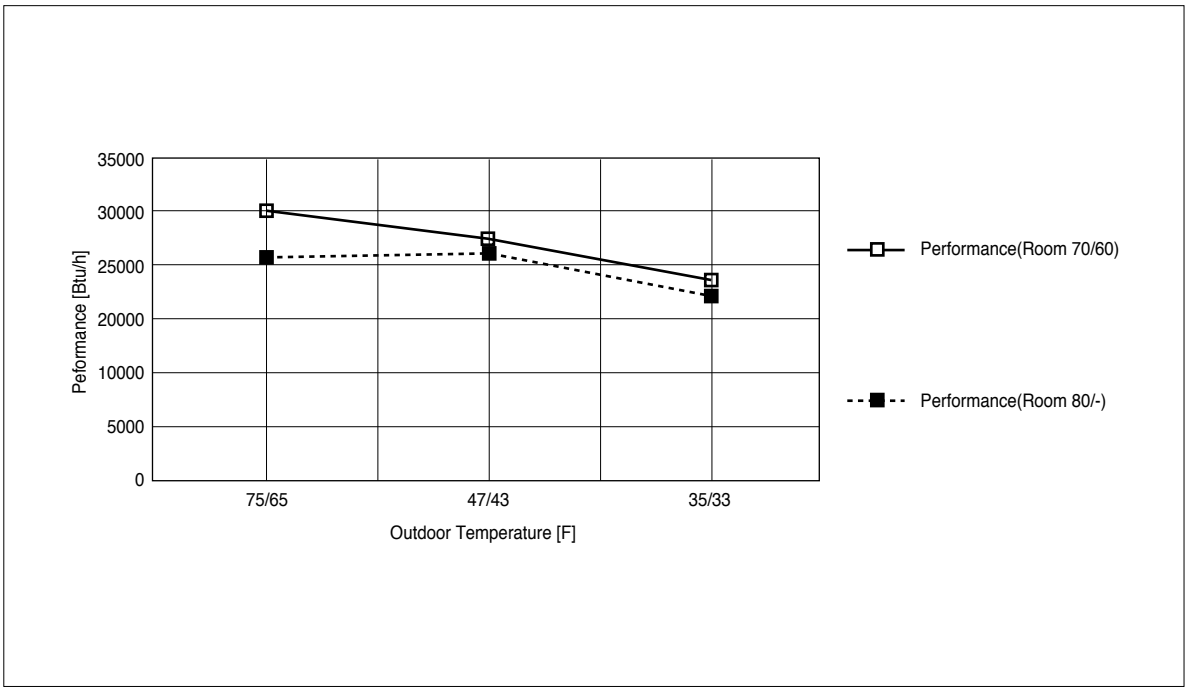
Pipe Length	80/67, 115/75			80/67, 95/75			67/57, 67/57		
[ft]	LP-A-room	LP-B-room	Current	LP-A-room	LP-B-room	Current	LP-A-room	LP-B-room	Current
16.4	73.1	74.5	15.0	69.7	71.3	12.6	58.5	57.1	10.7
32.8	70.6	72.7	14.7	68.2	69.2	12.5	56.5	56.1	10.5
49.2	69.4	72.0	15.1	68.2	69.2	12.6	55.9	55.2	10.4



2. Heating Characteristics

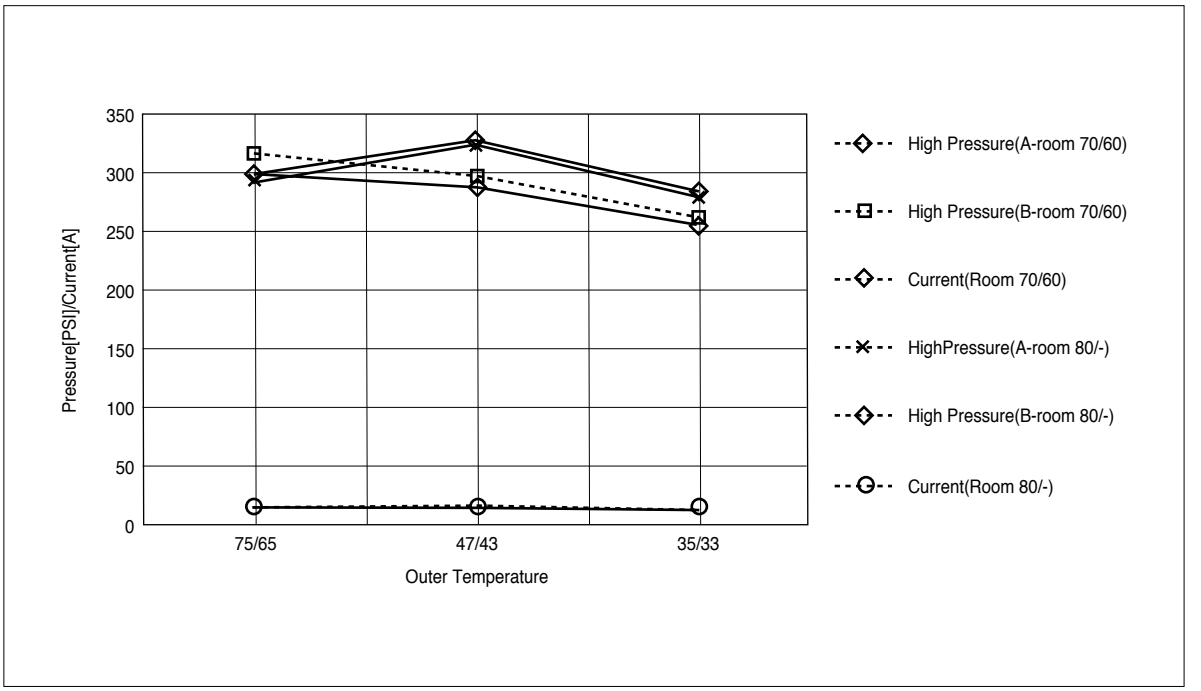
[1] Heating performance variation accordance with the outdoor temperature

OUTTEMP	HEATING	
	70/60	80/-
˚F	PERF	PERF
76/65	29699	25468
47/43	27870	26500
35/33	23320	21879



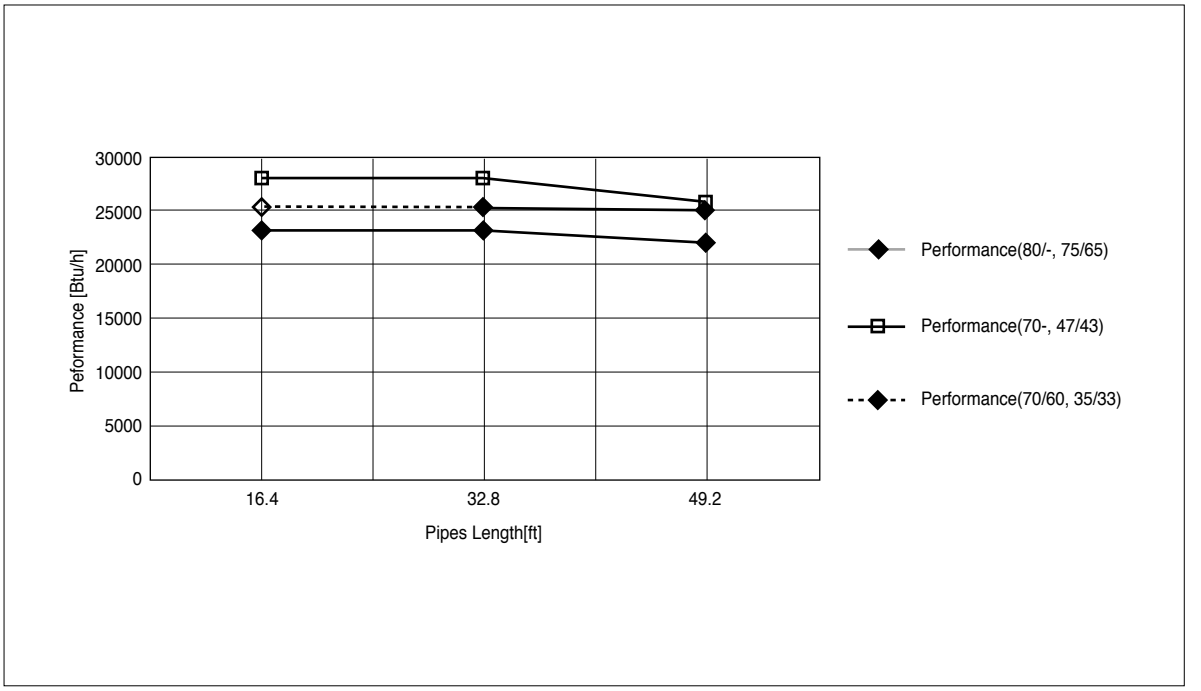
[2] High pressure variation duting the heating operation

OUTTEMP	HEATING					
	70/60			80/-		
˚F	HP-A-room	HP-B-room	Current	HP-A-room	HP-B-room	Current
75/65	304.7	311.8	13.1	297.8	303.2	12.6
47/43	292.1	300.3	13.1	318.6	322.8	13.9
35/33	255.5	262.3	12.1	281.1	287.4	12.8



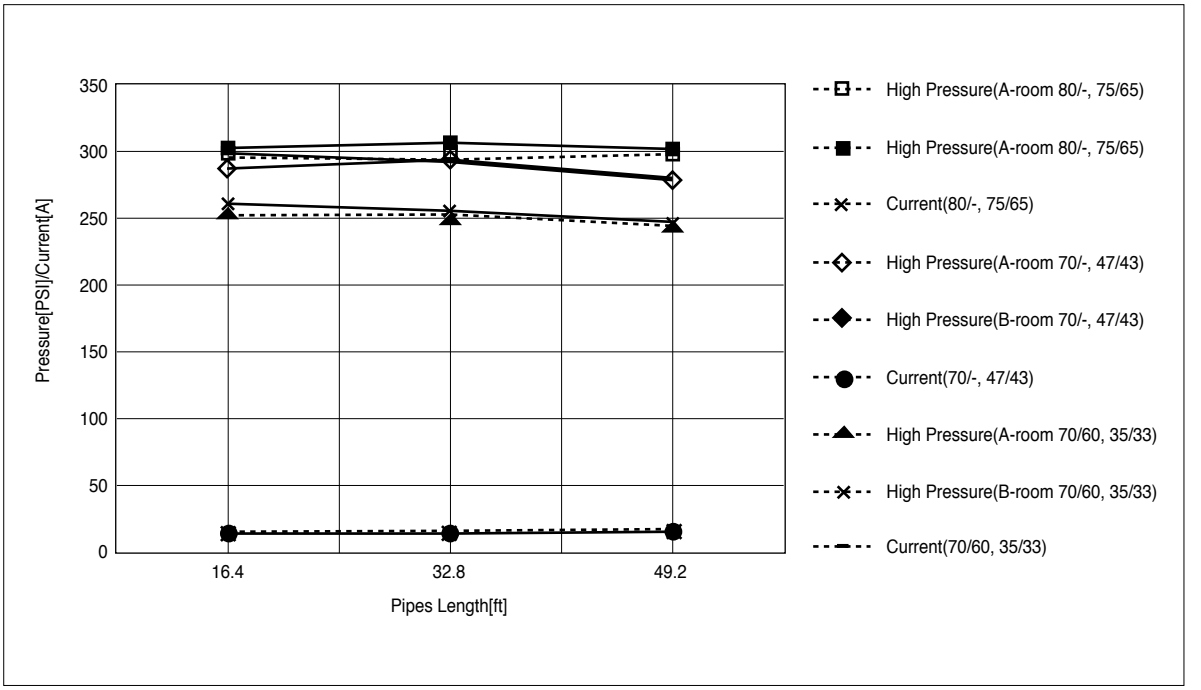
[3] Heating Performance variation accordance with pipes line set and temperature condition

Pipe Length	80/-, 75/65	70/-, 47/43	70/60, 35/33
[ft]	Performance-Ovld.[Btu/h]	Performance-Std[Btu/h]	Performance-Low[Btu/h]
16.4	25468	27870	23320
32.8	25437	27727	23376
49.2	25189	26138	22424



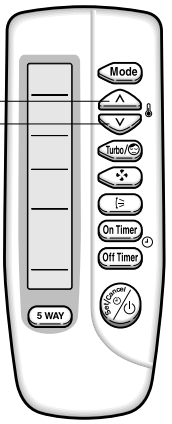
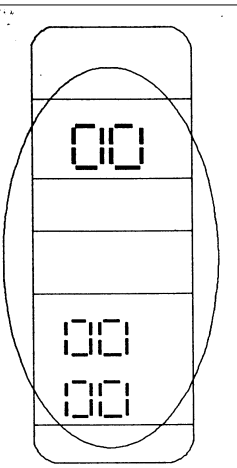
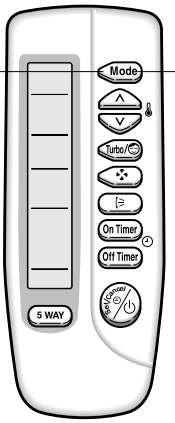
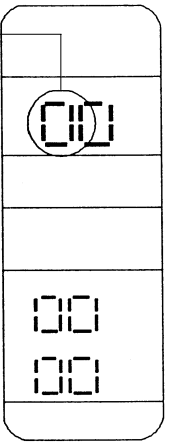
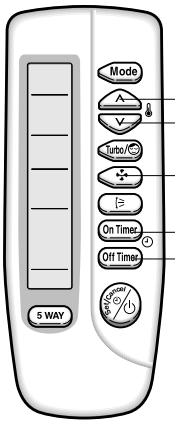
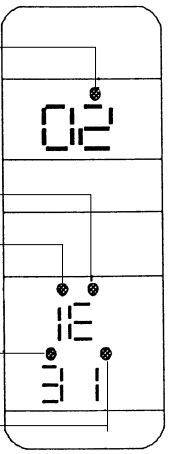
[4] High pressure & Current variation accordance with pipes line set & temperature condition.

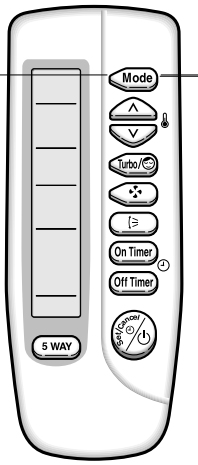
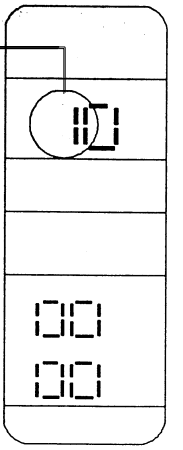
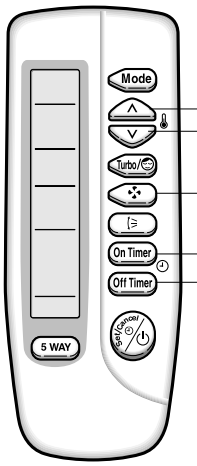
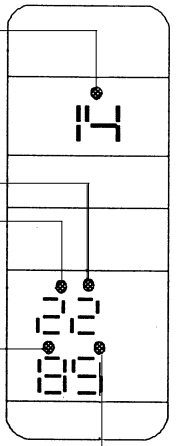
Pipe Length	80/-, 75/65			70/-, 47/43			70/60, 35/33		
[ft]	HP-A-room	HP-B-room	Current	HP-A-room	HP-B-room	Current	HP-A-room	HP-B-room	Current
16.4	297.8	303.2	12.6	292.1	300.3	13.1	255.5	262.3	12.1
32.8	292.5	298.6	12.5	293.3	290.8	12.8	249.9	251.9	11.6
49.2	296.9	299.8	12.5	275.3	275.9	12.4	243.0	246.2	11.4



10 Set up the Model option

❋ If you make the replacement of the ASS'Y CONTROL-IN or MAIN PCB ,
Be sure to be set up the model option as follow the steps

Remote controller operation method as per the step	Applicable key	Display status
1st step Method) ① Remove the battery of remote controller ② Press the temperature raise/down key simultaneously ③ Insert the battery again (Result) If the screen of remocn displays as shown in the right, go to the second step		
2nd step Method) If the first digit of LCD is 0 on the remocon screen, go to the 3rd step. ❊ If it is 1, press the mode key once to change to 0 and go to the 3rd step.		
3rd step Method) Press the marked key to input the option number. example) 021E31 Result) Go to 4th step if it displays as shown in the right (The number increases from 1~9, and A, b, C, d, E, F whenever pressing the key.)		

Remote controller operation method as per the step	Applicable key	Display status
4th step Method) After completion of 3rd step, and if the MODE KEY is pressed once, 1. 1~3 steps are saved internally 2. If the first number at the time is “1”, it is correct and so go to 5th step ❊ If pressing mode key and the first digit becomes 0, the screen of 1~3 steps can be seen.		
5th step Method) Pressing the marked key to input the option number. example) 142285 Result) If it displays as shown in the right go to the 6th step		
6th step Method) When pressing the operation ON/OFF key with the direction of remote controller for set, the sound “Ding, or Diriring is heard and then the input of option is completed. ❊ Refer to the right side if the error appears.	ERROR MODE 1. When the lamp(STANDARD( ), NATURE( ), TIMER( ) is flickering → failute of option input After removing the set power cord and insert it again, pressing the operation on/off key to retry and if the condition is same, EPROM is deffcective or misinsertted. So replace the PCB.	2. When all lamps ( ) are flickering with the sound of Dididiring, → The current option input is different from that of already input one: Check the option number correctly and if it is correct, press the key once more to input the option. (check correctly) → If the option is not input at the time and the all lamps are continuously flickering ; since it is the case that the option number is out of the input range, check the option number again and do again the steps from 1 - 6steps

<Table of the option code>

MODEL	OPTION CODE
AQ12✳5MC AQ12✳6MC	017725-17021d 007725-17021d
AQ09✳5MA AQ09✳6MA	016A25-1700d9 006A25-1700d9
AQ18✳5RC AQ18✳6RC	094415-15021d 084415-15021d
AQ24✳1RC AQ24✳2RC	097617-1A023F 087617-1A023F
AS12✳5MC AS12✳6MC	010000-17021F 000000-17021F
AS09✳5MA AS09✳6MA	010000-1700d9 000000-1700d9
AS07✳5MA AS07✳6MA	010000-1700b7 000000-1700b7
AS18✳5RC AS18✳6RC	090000-15021d 080000-15021d
AS24✳1RC AS24✳2RC	090000-1A0340 080000-1A0340

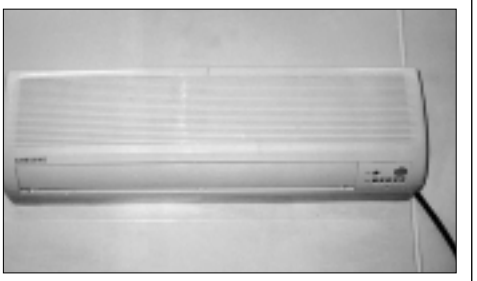
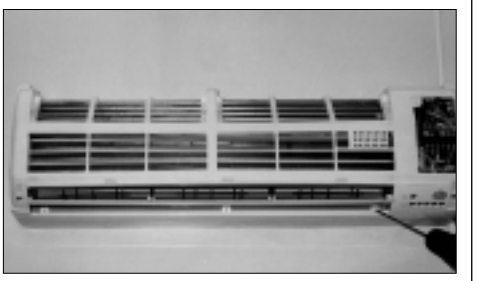
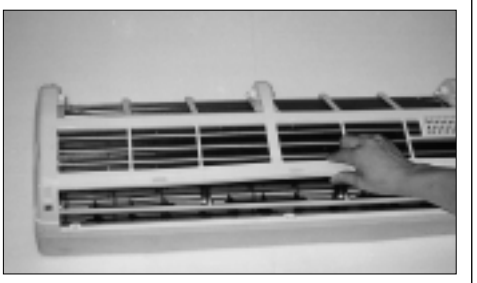
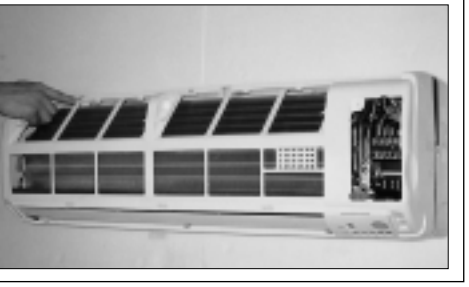
MEMO

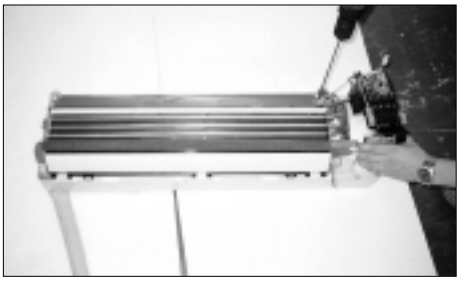
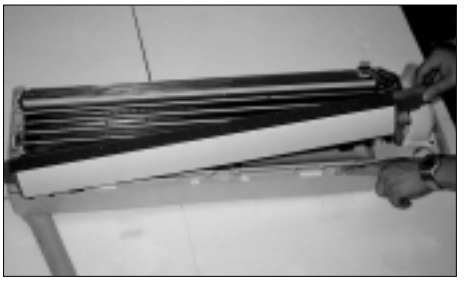
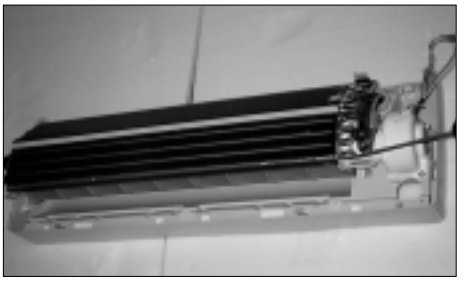
11 Disassembly and Reassembly

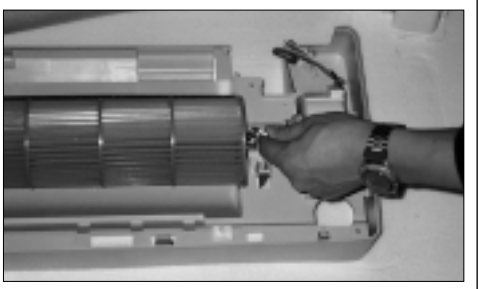
Stop operation of the air conditioner and remove the power cord before reparing the unit.

1 Single Type

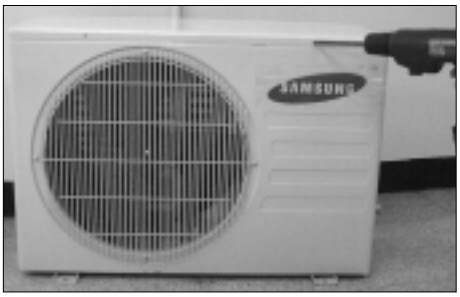
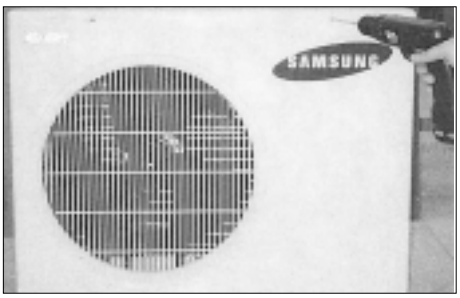
1-1. Indoor Unit : AQ(AS)✻✻A✻MA/MC

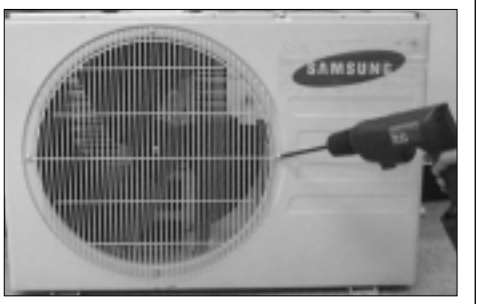
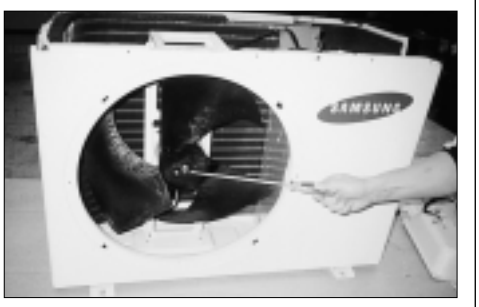
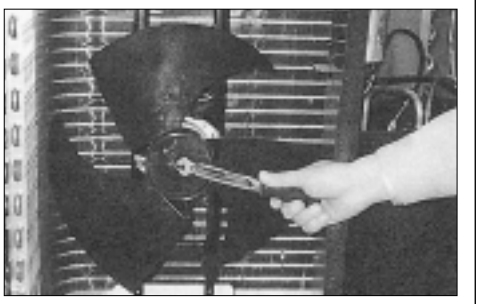
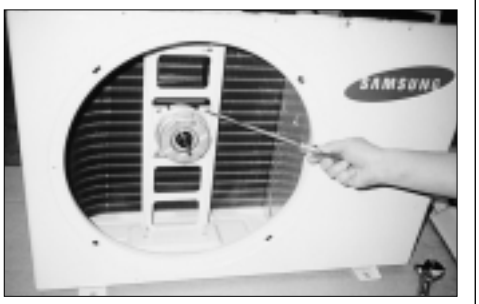
No	Parts	Procedure	Remark
①	Front Grille	1) Stop the air conditioner operation and block the main power. 2) Separate tape of front panel upper.	
		3) Contract the second finger to the left, and right handle and pull to open the inlet grille. 4) Take the left and right filter out. *Taking off the deodorizing filter. 5) Loosen one of the right fixing screw and separate the terminal cover. 6) Loosen three fixing screws of front grille.	
			
		7) Pull the upper left and right of discharge softly for the outside cover to be pulled out.	
		8) Pull softly the lower part of discharge and push it up. **Caution;** Assemble the front panel and fix the hooks of left and right.	

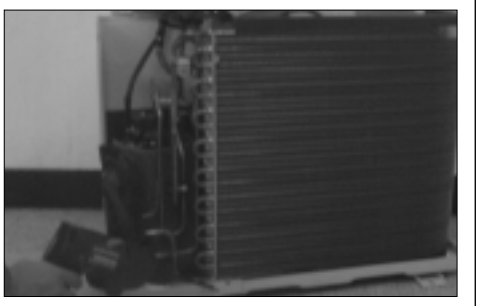
No	Parts	Procedure	Remark
②	Electrical Parts (Main PCB)	1) Do “1”above 2) Take all the connector of PCB upper side out. (Inclusion Power cord) 3) Separate the outdoor unit connection wire from the terminal block. 4) If pulling the Main PCB up. it will be taken out.	
③	Ass’y Tray Drain.	1) Do “1”, “2”, above Separate the drain hose from the extension drain hose. 2) Pull tray drain out from the back body.	
④	Heat Exchanger	1) Do “1” and “2”, “3”, above 2) Loosen two fixing earth screws of right side. 3) Separate the connection pipe. 4) Separate the holder pipe at the rearside. 5) Loosen the two or three fixing screws of left side. 6) Lifting the heat exchanger up a little to push the up side for separation from the indoor unit.	

No	Parts	Procedure	Remark
⑤	Fan Motor and Cross Fan	1) Do “1” “2” ”3” “4”, above. 2) Loosen the fixing two screws and separate the motor holder. 3) Loosen the fixing screw of fan motor. (By use of M3 wrench) 4) Separate the fan motor from the fan. 5) Separate the fan from the left holder bearing.	 

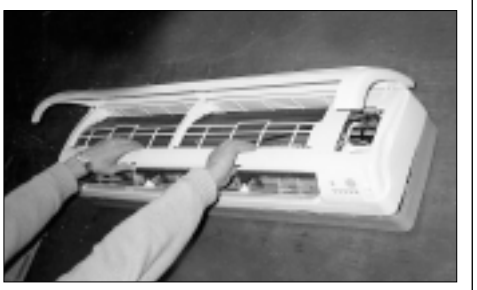
1-2. Outdoor Unit : UQ(US)⁎⁎A⁎MA/MC

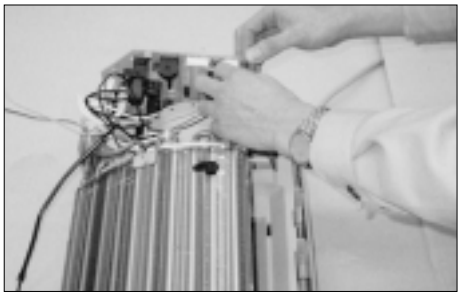
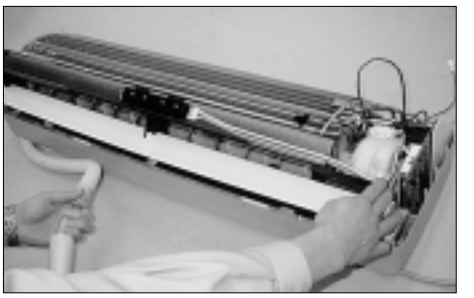
No	Parts	Procedure	Remark
①	Common Work	1) Loosen the fixing screw and separate the Handle-Cabi RH. 2) Separate the connection wire from the terminal block.	<AQ(AS)⁎⁎A⁎MA/MC>
		3) Loosen the 6 fixing screws and separate the upper cabinet.	
		4) Loosen the fixing screw of Ass'y E-part.	
		5) Loosen the 5 fixing screws and separate the side cabinet.	
		1) Turn off the unit and remove the power cable 2) Remove the top cover. 3) Remove the control box cover. 4) Unplug the ass'y cable. 5) Remove the cabi-side. 6) Remove the cabi-front. * When you assemble the parts, check if the each parts and electric connectors are fixed firmly.	<AQ(AS)⁎⁎A⁎RC> 

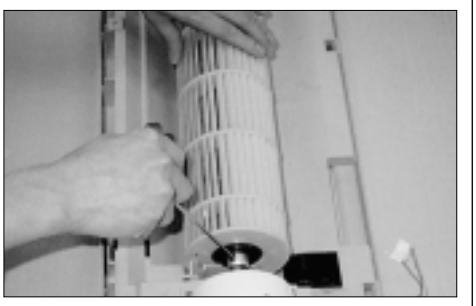
No	Parts	Procedure	Remark
②	Fan-Motor	1) Loosen 4 fixing screw of the Guard-Fan.	
		2) Remove the nut flange (Turn to the right to remove, as it is a left hand screw) 3) Separate the fan.	
		4) Loosen four fixing screws to separate the motor.	<AQ(AS)✳✳A✳RC>  

No	Parts	Procedure	Remark
③	Heat Exchange	1) Do “1”, 2 above. 2) Loosen two fixing screws of left and right side. 3) Disassemble the inlet and outlet pipe by welding. 4) Separate the heat exchanger.	
④	Compressor	1) Do “1”, above. 2) Loosen the nut on the terminal cover and open the terminal cover. 3) Disassemble the inlet and outlet pipe of compressor by welding. 4) Disassemble the inlet and outlet pipe of condenser by welding 5) Loosen the three bolts of the lower part. 6) Separate the compressor.	

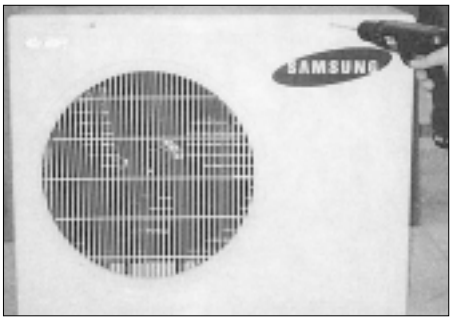
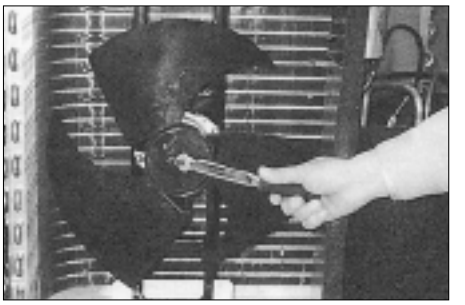
1-3. Indoor Unit : AQ(AS)✳✳A✳RC

No	Parts	Procedure	Remark
①	Front Grille	1) Stop the air conditioner operation and block the main power. 2) Separate tape of front panel upper.	
		3) Contract the second finger to the left, and right handle and pull to open the inlet grille. 4) Take the left and right filter out. *Taking off the deodorizing filter. 5) Loosen one of the right fixing screw and separate the terminal cover. 6) Loosen three fixing screws of front grille.	
		7) Pull the upper left and right of discharge softly for the outside cover to be pulled out.	
		8) Pull softly the lower part of discharge and push it up. **Caution;** Assemble the front panel and fix the hooks of left and right.	

No	Parts	Procedure	Remark
②	Electrical Parts (Main PCB)	1) Do “1”above 2) Take all the connector of PCB upper side out. (Inclusion Power cord) 3) Separate the outdoor unit connection wire from the terminal block. 4) If pulling the Main PCB up. it will be taken out.	
③	Ass’y Tray Drain.	1) Do “1”, “2”, above Separate the drain hose from the extension drain hose. 2) Pull tray drain out from the back body.	
④	Heat Exchanger	1) Do “1” and “2”, “3”, above 2) Loosen two fixing earth screws of right side. 3) Separate the connection pipe. 4) Separate the holder pipe at the rearside. 5) Loosen the two or three fixing screws of left side. 6) Lifting the heat exchanger up a little to push the up side for separation from the indoor unit.	

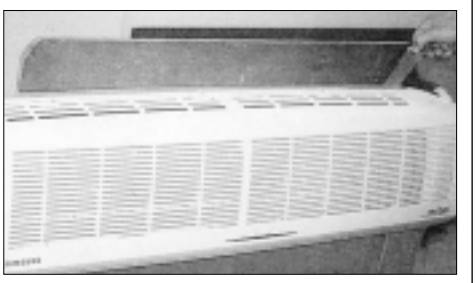
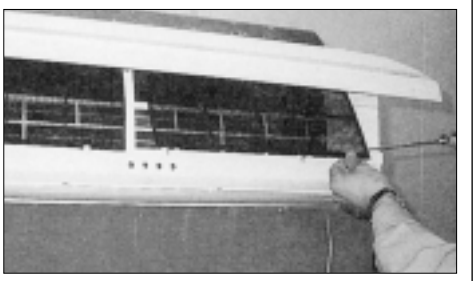
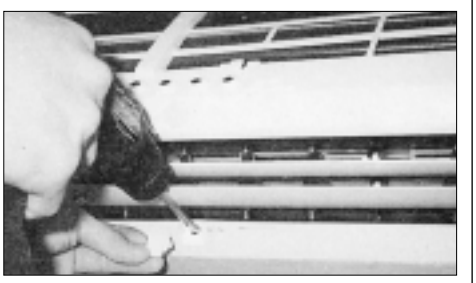
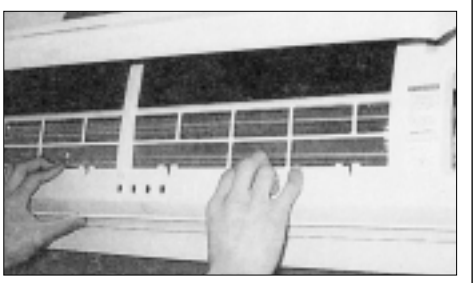
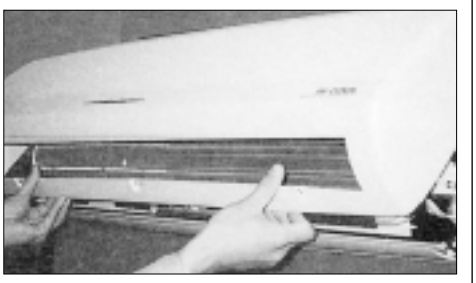
No	Parts	Procedure	Remark
⑤	Fan Motor and Cross Fan	1) Do “1” “2” ”3” “4”, above. 2) Loosen the fixing two screws and separate the motor holder. 3) Loosen the fixing screw of fan motor. (By use of M3 wrench) 4) Separate the fan motor from the fan. 5) Separate the fan from the left holder bearing.	 

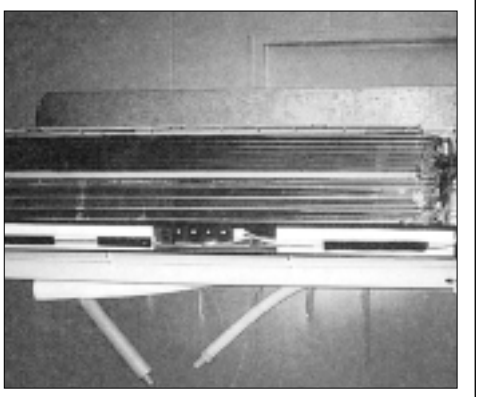
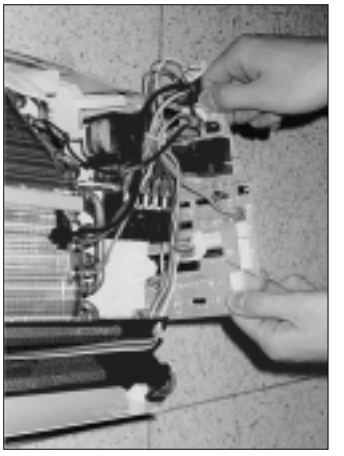
1-4. Outdoor Unit : UQ(US)**A*RC

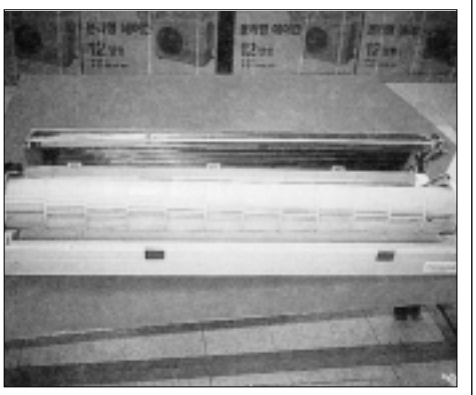
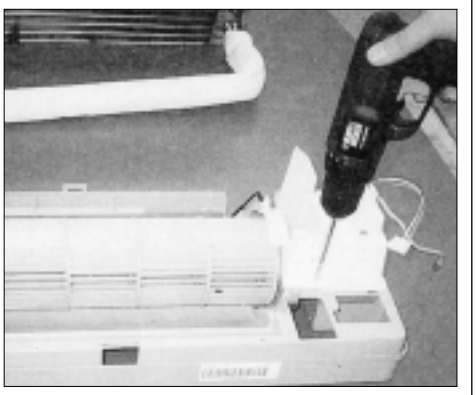
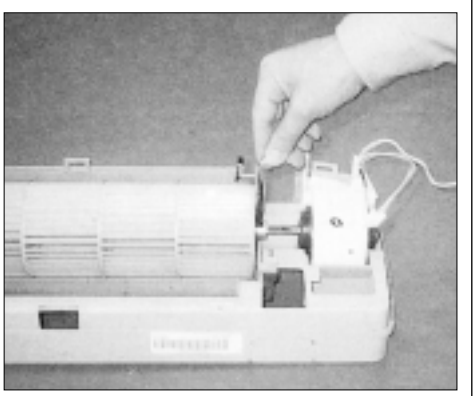
No	Parts	Procedure	Remark
①	Cabinet	1) Turn off the unit and remove the power cable 2) Remove the top cover. 3) Remove the control box cover. 4) Unplug the ass'y cable. 5) Remove the cabi-side. 6) Remove the cabi-front. * When you assemble the parts, check if the each parts and electric connectors are fixed firmly.	
②	Fan Motor & Propeller Fan	1) Do Procedure 1 above. 2) Remove the nut flange. (Turn to the right to remove as it is a left turned screw) 3) Disassemble the propeller fan.	

2 Multi Type

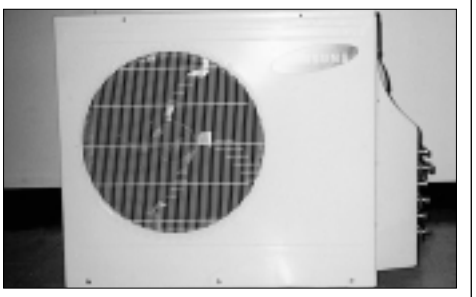
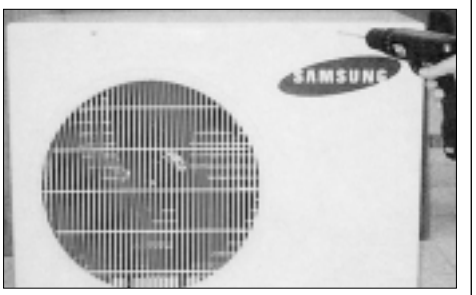
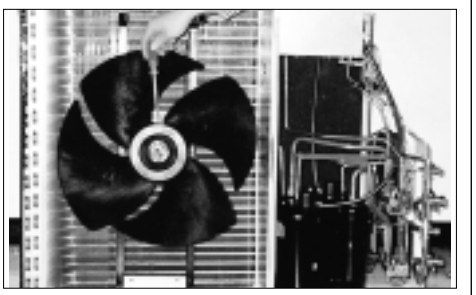
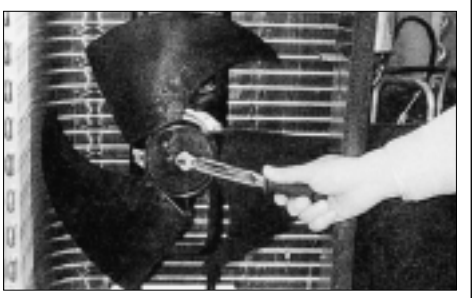
2-1. Indoor Unit

No	Parts	Procedure	Remark
①	Front Grille	1) Stop the air conditioner operation and block the main power. 2) Seperate the tape of front. Panel upper.	
		3) Contract the second finger to the left and right handle and pull to open the inlet grille. 4) Take the left and right filter out. 5) Loosen one of the right fixing screw and seperate the terminal cover.	
		6) Open the cover screw and loosen three fixing screws of front grille.	
		7) Pull the upper left and right of discharge softly for the outside cover to be pulled out.	
		8) Pull softly the lower part of discharge and push it up **Caution:** Assemble the front panel and fix the hooks of left and right.	

No	Parts	Procedure	Remark
②	Filter Frame	1) Loosen the left and right screw of the Holder Filter, and Separate the Holder Filter.	
③	Ass'y Tray Drain	1) Do ①②, above. Separate the holder at the rear side of Indoor unit. 2) Take the display PCB out. (Center of indoor unit). 3) Loosen three fixing screws of left and right. 4) Pull tray drain out from the back body.	
④	Main PCB	1) Do "①②", above 2) Take all the connector of PCB upper side out. (Inclusion Power cord) 3) Separate the outdoor unit connection wire from the terminal block. 4) If pulling the Main PCB up, it will be taken out. (Separate the TRANS hook, it before).	

No	Parts	Procedure	Remark
⑤	Heat Exchanger	1) Do "①②③④", above. 2) Loosen the left screws of the heat exchanger. Lifting the heat exchanger up a little to push the up side for separation from the indoor unit	 
⑥	Fan Motor and Cross Fan	1) Do "①②③④⑤", above. 2) Loosen the fixing two screws and separate the motor holder. 3) Loosen the fixing screw of motor fan. (By use of M3 wrench) Separate the motor from the fan. Separate the fan motor the left holder bearing.	 

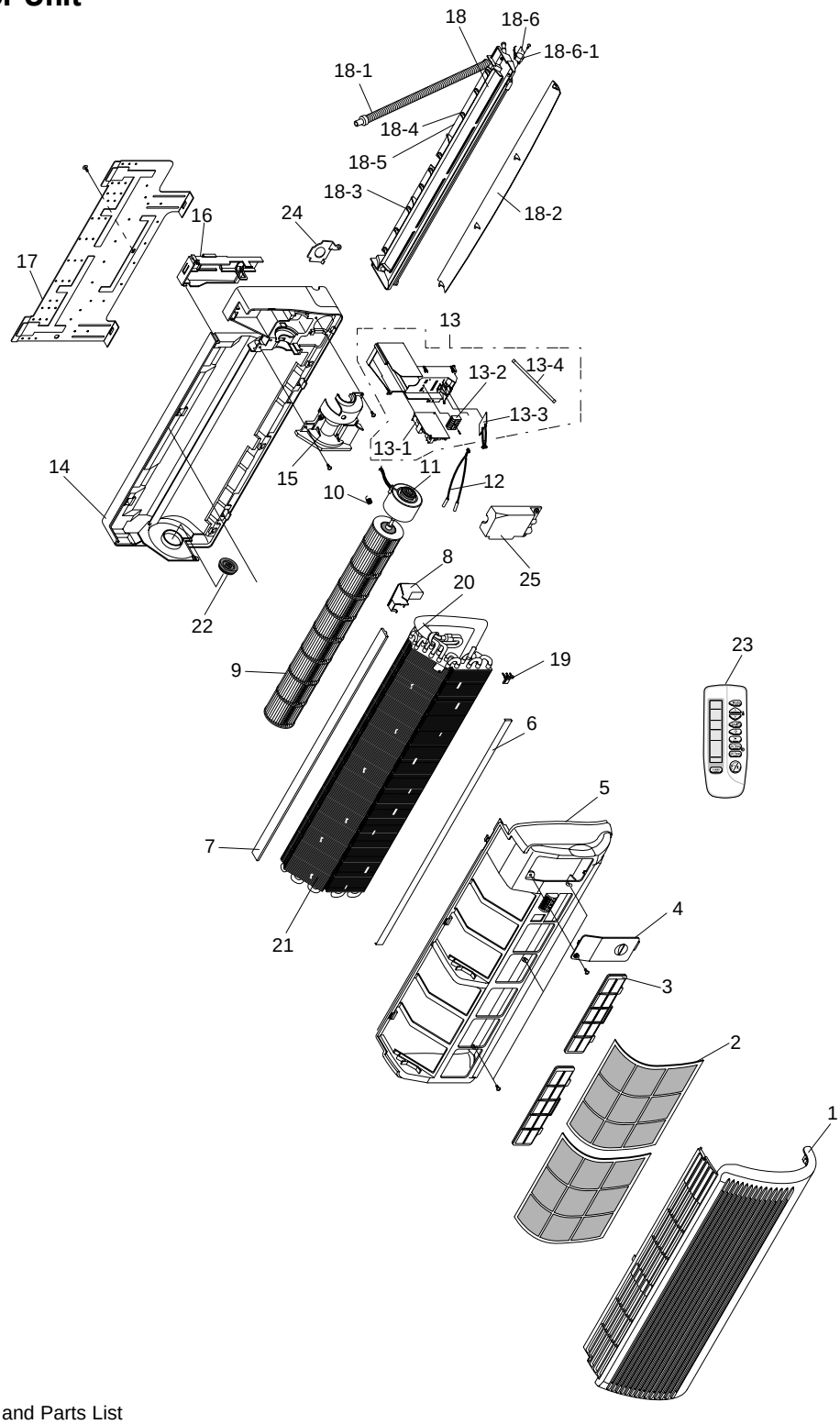
2-2. Outdoor Unit

No	Parts	Procedure	Remark
①	Cabinet	1) Turn off the unit and remove the power cable 2) Remove the top cover. 3) Remove the control box cover. 4) Unplug the ass'y cable. 5) Remove the cabi-side. 6) Remove the cabi-front. * When you assemble the parts, check if the each parts and electric connectors are fixed firmly.	 
②	Fan Motor & Propeller Fan	1) Do Procedure ① above. 2) Remove the nut flange. (Turn to the right to remove as it is a left turned screw) 3) Disassemble the propeller fan.	 <AM18A1C2/AD18A1C2> 

12 Exploded Views and Parts List

1 Single Type For AQ(AS)**A6MC(MA) Models

1-1. Indoor Unit



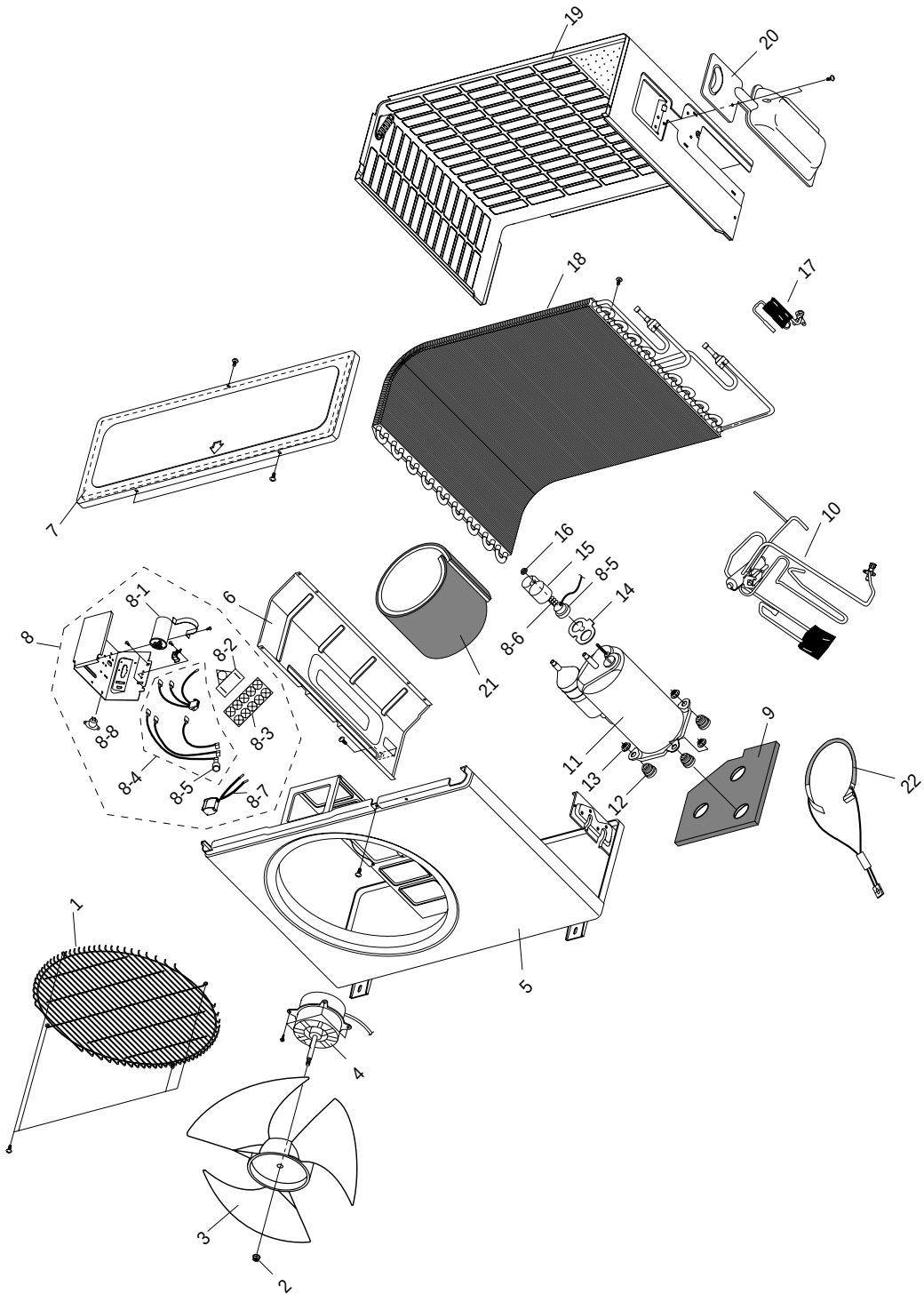
■ Parts List

No.	CODE NO	Description	Q'TY		REMARK
			AQ12A5(6)MC	AQ09A5(6)MA	
1	DB64-00085A	GRILLE AIR INLET	1	1	
2	DB63-00064A	GUARD-AIR FILTER	2	2	
3	DB74-00011A	FILTER CLEANER ASS´Y	1	1	
4	DB63-00067A	COVER TEMINAL	1	1	
5	DB92-00031L	ASS´Y PANEL	1	1	
6	DB67-00051A	SPACER EVAP LOW	1	1	
7	DB67-00032A	SPACER EVAP UP	1	1	
8	DB63-00083A	COVER U BEND	1	1	
9	DB94-00040E	ASS´Y FAN CROSS(SF)	1	1	
10	DB60-20011A	BOLT SPECIAL	1	1	
11	DB31-00071A	MOTOR FAN IN	-	1	
	DB31-00072A	"	1	-	
12	DB32-00020A	THERMISTOR WIRE ASS´Y	1	1	
13	DB93-00255G	ASS´Y CONTROL IN	-	1	
	DB93-00255H	"	1	-	
13-1	DB93-00267A	ASS´Y PCB MAIN	1	-	
	DB93-00267D	"	-	1	
13-1-1	1103-001175	IC EPROM	1	1	
13-1-2	1203-001813	IC PWM CONTROLLER	1	1	
13-1-3	3501-001154	RELAY MINIATURE	1	1	
13-1-4	3502-000115	SSR	1	1	
13-1-5	DB09-00094A	IC MCU	1	1	
13-2	DB65-00030A	TERMINAL BLOCK ASS´Y	1	1	
13-3	DB93-00268E	ASS´Y PCB DISPLAY	1	1	
13-3-1	2202-000780	C CERAMIC,MLC-AXIAL	1	1	
13-3-2	DB32-00017A	MODULE REMOCON	1	1	
13-4	DB39-00147A	CONNECT WIRE PCB	1	1	
14	DB94-00056A	ASS´Y BACK BODY(RIGHT SIDE)	1	1	
15	DB61-00162A	HOLDER MOTOR	1	1	
16	DB61-00165A	HOLDER PIPE	1	1	
17	DB70-00036A	PLATE HANGER	1	1	
18	DB94-00058B	ASS´Y TRAY DRAIN(RIGHT SIDE)	1	1	
18-1	DB94-00018A	ASS´Y DRAIN HOSE	1	1	
18-2	DB66-00042A	BLADE H	1	1	
18-3	DB66-00128A	BLADE V,A	3	3	
18-4	DB66-00128B	BLADE V,B	6	6	
18-5	DB63-00082A	SCREEN SAFETY WIRE	1	1	
18-6	DB95-20138A	ASS´Y MOTOR STEPPING	1	1	
18-6-1	DB31-10129A	MOTOR STEPPING; GSP 24RW	1	1	
19	DB61-40251A	HOLDER SENSOR	1	1	
20	DB67-60030A	SPRING SENSOR	1	1	
21	DB98-01494A	EVAPORATOR ASS´Y	1	-	
	DB75-00020A	EVAPORATOR ASS´Y	-	1	
22	DB94-40003A	ASS´Y BEARING	1	1	
23	DB93-00329K	ASS´Y REMOCON	1	1	
24	DB70-00114A	PLATE-KNOCKOUT	1	1	
25	DB63-00226A	COVER-TERMINAL BLOCK	1	1	

■ Parts List

No.	CODE NO	Description	Q'TY			REMARK
			AS12A5(6)MC	AS09A5(6)MA	AS07A5(6)MA	
1	DB64-00085A	GRILLE AIR INLET	1	1	1	
2	DB63-00064A	GUARD-AIR FILTER	2	2	2	
3	DB74-00011A	FILTER CLEANER ASS´Y	1	1	1	
4	DB63-00067A	COVER TEMINAL	1	1	1	
5	DB92-00031L	ASS´Y PANEL	1	1	1	
6	DB67-00051A	SPACER EVAP LOW	1	1	1	
7	DB67-00032A	SPACER EVAP UP	1	1	1	
8	DB63-00083A	COVER U BEND	1	1	1	
9	DB94-00040E	ASS´Y FAN CROSS(SF)	1	1	1	
10	DB60-20011A	BOLT SPECIAL	1	1	1	
11	DB31-00071A	MOTOR FAN IN	-	1	1	
	DB31-00071B	"	1	-	-	
12	DB32-00020A	THERMISTOR WIRE ASS´Y	1	1	1	
13	DB93-00270G	ASS´Y CONTROL IN	-	1	1	
	DB93-00270J	"	1	-	-	
13-1	DB93-00266A	ASS´Y PCB MAIN	1	-	-	
	DB93-00266D	"	-	1	1	
13-1-1	1103-001175	IC EPROM	1	1	1	
13-1-2	1203-001813	IC PWM CONTROLLER	1	1	1	
13-1-3	3501-001154	RELAY MINIATURE	1	1	1	
13-1-4	3502-000115	SSR	1	1	1	
13-1-5	DB09-00071A	IC MCU	1	1	1	
13-2	DB65-00030A	TERMINAL BLOCK ASS´Y	1	1	1	
13-3	DB93-00268E	ASS´Y PCB DISPLAY	1	1	1	
13-3-1	2202-000780	C CERAMIC,MLC-AXIAL	1	1	1	
13-3-2	DB32-00017A	MODULE REMOCON	1	1	1	
13-4	DB39-00147A	CONNECT WIRE PCB	1	1	1	
14	DB94-00056A	ASS´Y BACK BODY(RIGHT SIDE)	1	1	1	
15	DB61-00162A	HOLDER MOTOR	1	1	1	
16	DB61-00165A	HOLDER PIPE	1	1	1	
17	DB70-00036A	PLATE HANGER	1	1	1	
18	DB94-00058B	ASS´Y TRAY DRAIN(RIGHT SIDE)	1	1	1	
18-1	DB94-00018A	ASS´Y DRAIN HOSE	1	1	1	
18-2	DB66-00042A	BLADE H	1	1	1	
18-3	DB66-00128A	BLADE V,A	3	3	3	
18-4	DB66-00128B	BLADE V,B	6	6	6	
18-5	DB63-00082A	SCREEN SAFETY WIRE	1	1	1	
18-6	DB95-20138A	ASS´Y MOTOR STEPPING	1	1	1	
18-6-1	DB31-10129A	MOTOR STEPPING; GSP 24RW	1	1	1	
19	DB61-40251A	HOLDER SENSOR	1	1	1	
20	DB67-60030A	SPRING SENSOR	1	1	1	
21	DB98-01494A	EVAPORATOR ASS´Y	1	-	-	
	DB75-00020B	EVAPORATOR ASS´Y	-	1	1	
22	DB94-40003A	ASS´Y BEARING	1	1	1	
23	DB93-00329J	ASS´Y REMOCON	1	1	1	
24	DB70-00114A	PLATE-KNOCKOUT	1	1	1	
25	DB63-00226A	COVER TERMINAL BLOCK	1	1	1	

1-2. Outdoor Unit(UQ12A6MC/US12A6MC)



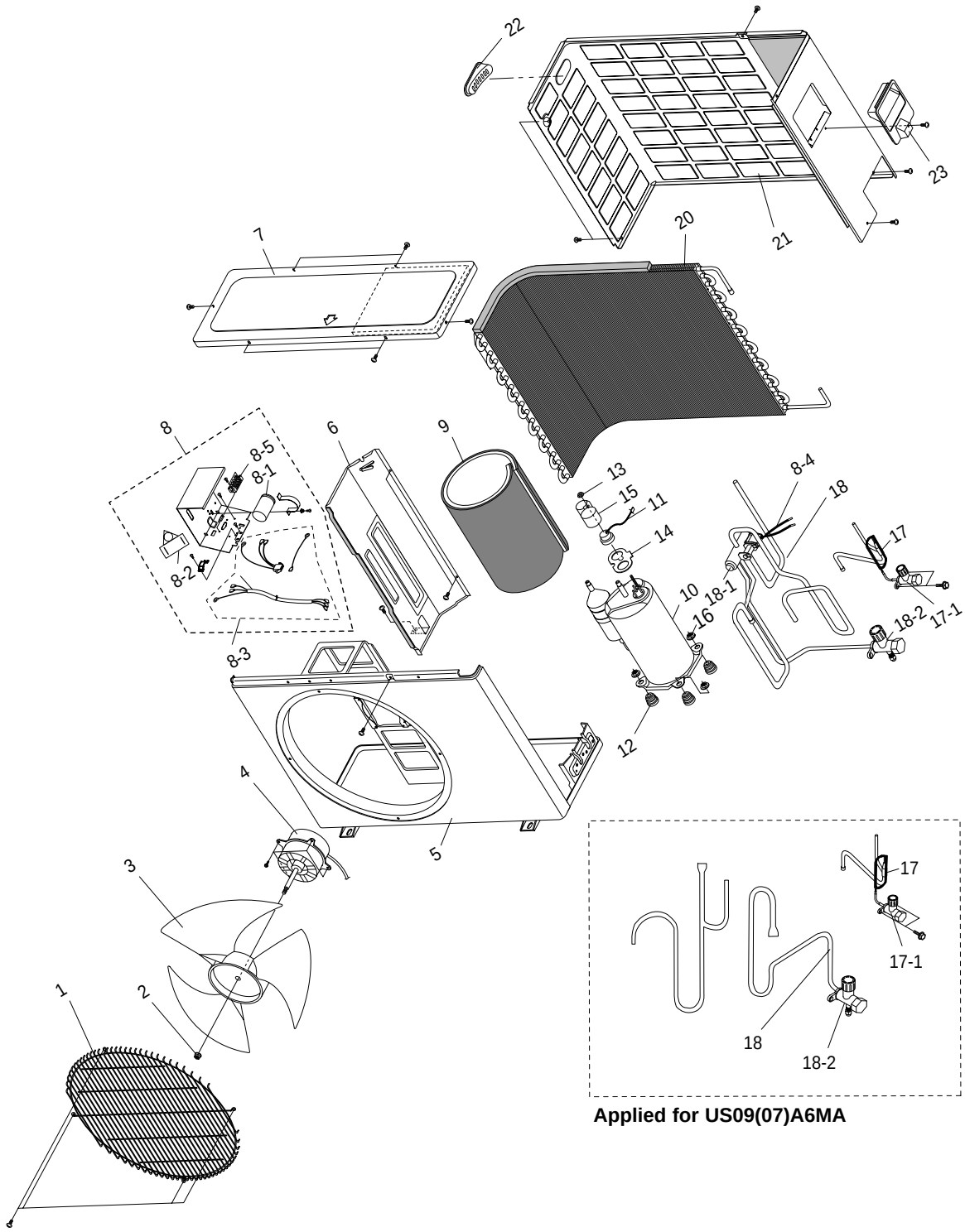
■ Parts List (Outdoor Unit)

No.	CODE NO	Description	Specitication	Q'TY
				UQ12A5(6)MC
1	DB63-00071A	GUARD FAN	HSER	1
2	DB60-30004A	NUT FLANGE	2C SM20C M6 NTR	1
3	DB67-50063A	PROPELLER-FAN	AS+G/F, Ø405	1
4	DB31-10058C	MOTOR FAN OUT	ASSO2OWTVA	1
5	DB90-00272A	ASS´Y FRAME(PAINT)	ASS'Y	1
6	DB94-50077A	ASS´Y PARTITION	ASS'Y	1
7	DB90-00085B	CABINET UPPER	SECC-P	1
8	DB93-00424E	ASS´Y CONTROL OUT	ASS'Y	1
8-1	2501-001226	CAPACITOR COMP	25µF 370VAC	1
8-2	2301-001375	CAPACITOR MOTOR	1.5µF 450VAC	1
8-3	DB65-40074A	TERMINAL BLOCK	5P, N, L, 1, 2, 3	1
8-4	DB93-00423A	ASS´Y LEAD WIRE	ASS'Y	1
8-5	DB47-20001L	O L P	MRA12002-12008	1
8-6	DB67-60020A	O L P SPRING	STS304	1
8-7	DB27-00004B	ASS´Y SOLENOIDE	LB81001 RANCO	1
8-8	DB32-00007A	THERMOSTAT	250V, 7A	1
9	DB72-50574D	CLOTH COMP BOTTOM	FELT	1
10	DB99-00089A	ASS´Y 4WAY VALVE	ASS'Y	1
11	48A135IV1EL	COMPRESSOR	208-230V 60Hz	1
12	DB73-10004B	GROMMET-ISOLATOR	SILICON	3
13	DB60-30028A	NUT-WASHER	HEX 2C MB ZPC	3
14	DB63-20002A	GASKET	EPDM	1
15	DB63-10165D	COVER TERMINAL	PBT	1
16	DB60-30018A	NUT-FLANGE	M5, SM20C	1
17	DB96-00513A	ASS´Y-CAPILLARY	ASS'Y(1.7 X1100)	1
18	DB96-00509A	ASS´Y COND	ASS'Y(SF)	1
19	DB64-00136C	CABINET SIDE	ASS'Y(BENDING)	1
20	DB67-90025A	HANDLE CABI, RH	ABS	1
21	DB72-00211A	CLOTH-COMP SIDE	FELT	1
22	DB95-00212A	ASS'Y-HEATER	ASS'Y	1

■ Parts List (OUTDOOR UNIT)

No.	CODE NO	Description	Specitication	Q'TY
				US12A5(6)MC
1	DB63-00071A	GUARD FAN	HSER	1
2	DB60-30004A	NUT FLANGE	2C SM20C M6 NTR	1
3	DB67-50063A	PROPELLER-FAN	AS+G/F, Ø405	1
4	DB31-10058C	MOTOR FAN OUT	ASSO2OWTVA	1
5	DB90-00272A	ASS´Y FRAME(PAINT)	ASS'Y	1
6	DB94-50077A	ASS´Y PARTITION	ASS'Y	1
7	DB90-00085B	CABINET UPPER	SECC-P	1
8	DB93-00424D	ASS´Y CONTROL OUT	ASS'Y	1
8-1	2501-001226	CAPACITOR COMP	25µF 370VAC	-
8-2	2301-001377	CAPACITOR MOTOR	1.2µF 450VAC	1
8-3	DB65-40074A	TERMINAL BLOCK	5P, N, L, 1, 2, 3	1
8-4	DB93-00423A	ASS´Y LEAD WIRE	ASS'Y	1
8-5	DB47-20001L	O L P	MRA12002-12008	1
8-6	DB67-60020A	O L P SPRING	STS304	1
9	DB72-50574D	CLOTH COMP BOTTOM	FELT	1
10	DB96-00489A	ASS´Y SUCTION	ASS'Y	1
	DB96-00488A	ASS'Y DISCHARGE	ASS'Y	1
11	48A135IV1EL	COMPRESSOR	220V 60Hz	1
12	DB73-10004B	GROMMET-ISOLATOR	SILICON	3
13	DB60-30028A	NUT-WASHER	HEX 2C MB ZPC	3
14	DB63-20002A	GASKET	EPDM	1
15	DB63-10165D	COVER TERMINAL	PBT	1
16	DB60-30018A	NUT-FLANGE	M5, SM20C	1
17	DB96-00492B	ASS´Y-CAPILLARY	ASS'Y(1.7 X1100)	1
18	DB96-00510A	ASS´Y COND	ASS'Y	1
19	DB64-00136C	CABINET SIDE	ASS'Y(BENDING)	1
20	DB67-90025A	HANDLE CABI, RH	ABS	1
21	DB72-00211A	CLOTH-COMP SIDE	FELT	1

1-3. Outdoor Unit(US07A6MA/UQ09A6MA/US09A6MA)



Applied for US09(07)A6MA

■ Parts List (OUTDOOR UNIT)

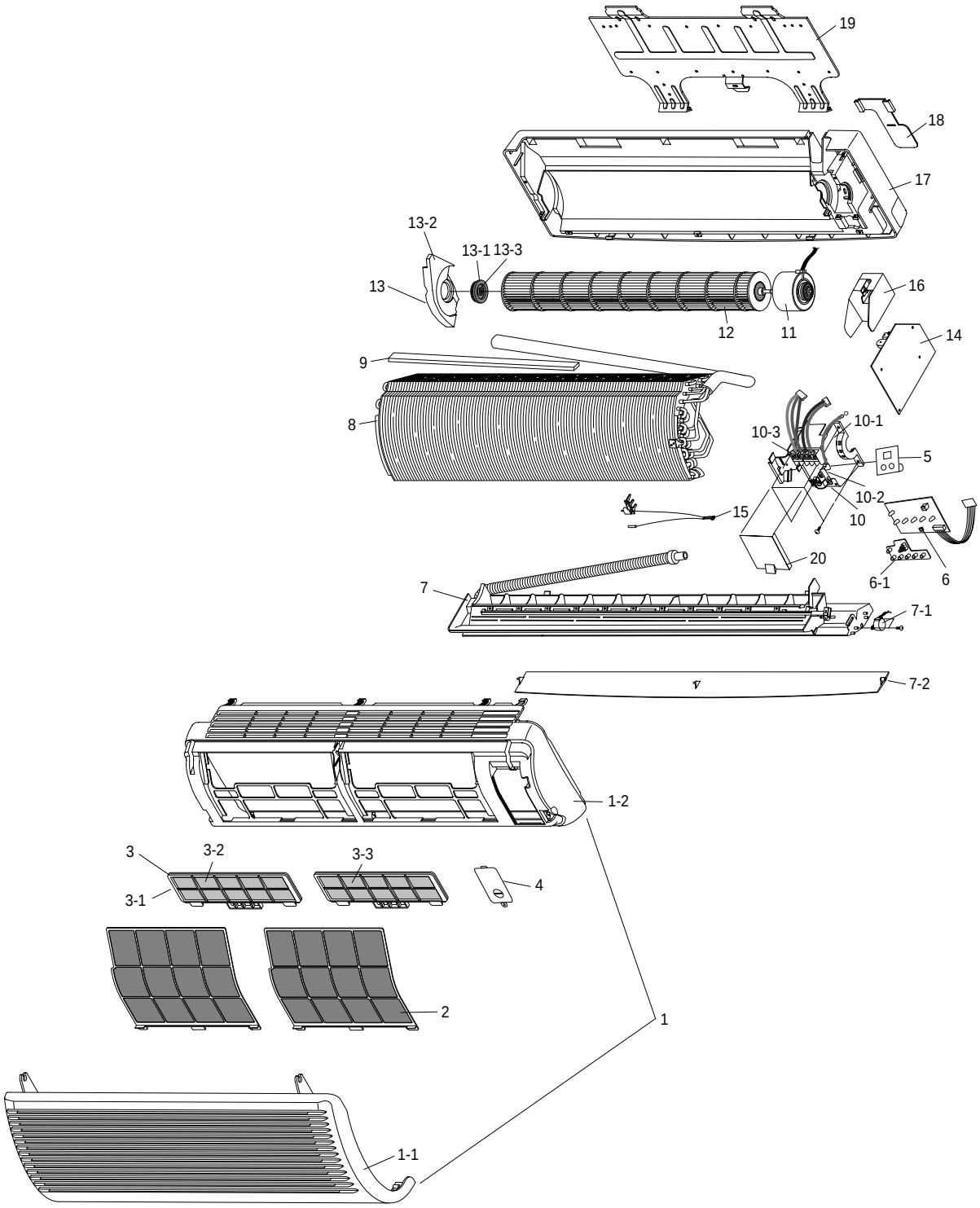
No.	CODE NO	Description	Specitication	Q'TY
				UQ09A5(6)MA
1	DB63-00086B	GUARD-FAN	HSWR, IP2, 5&3, SC-90073T, NEW A-P/J 370FAN	1
2	DB60-30004A	NUT-FLALNGE	2C, M6, SM20C, NTR	1
3	DB67-00036A	FAN-PROPELLER	AS+G/F20%, PI 375, BLK	1
4	DB31-10058G	MOTOR-FAN OUT	AMASS-020ZREA, FAN OUT, 115V/60Hz	1
5	DB90-00264A	ASS´Y FRAME (PAINT)	SC-90073T	1
6	DB94-00078A	ASS´Y PARTITION	ASS´Y 620mm COND	1
7	DB90-00077B	ASS´Y CABI-UPPER	ASS´Y	1
8	DB93-00424A	ASS´Y CONTROL OUT	ASS´Y	1
8-1	2501-001230	C-OIL (COMP)	45µF, 370VAC	1
8-2	2301-001379	C-OIL (MOTOR)	4.0µF, 450VAC	1
8-3	DB33-00423A	ASS'Y LEAD WIRE	ASSY	1
8-4	DB27-00004B	SOLENOID ASS´Y	RANCO, LB81001	1
8-5	DB65-40074A	TERMINAL BLOCK	5P, N, L, 1, 2, 3	1
9	DB72-00453A	CLOTH-COMP	T8, 425, 225, 44F COMP	1
10	44B092HW1EL	ROTARY COMP	1Ph, 115V, 60Hz	1
11	DB35-20066E	PROTECTOR O/L	MRA12093-12007	1
12	DB73-10004B	GROMMET-ISOLATOR	SILICON	3
13	DB60-30018A	NUT-FLANGE	PI0.8, M5, SM20C	1
14	DB63-20002A	GASKET	EPDM, TO.8	1
15	DB63-10165D	COVER-TERMINAL	PBT	1
16	DB60-30028A	NUT-WASHER	HEX, 2C, M8, ZPC	3
17	DB96-00554A	ASS´Y TUBE CAPILLARY	ID1.5 x 1100+1/4"	1
17-1	DB62-00254B	VALVE-SERVICE	1/4INCH	1
18	DB99-00090D	ASS´Y VALVE 4WAY	VK1100B+3/8"	1
18-1	DB62-00118A	4WAY VALVE	BRASS, 3/8INCH, T1.0, RANCO	1
18-2	DB62-40073B	VALVE-SERVICE	C3771BD, 432L/H, 3/8", 30Kg/cm2G	1
20	DB75-00029A	ASS´Y COND	1.5D-FIN, COATTING 620mm	1
21	DB64-60171D	CABINET-SIDE	SECC-P, T 0.8, A-P/J	1
22	DB67-90024A	HANDLE-CABI LF	ABS	1
23	DB63-10443C	COVER-E, PARTS ASS'Y	SC-90073R	1

■ Parts List

No.	CODE NO	Description	Specitication	Q'TY	
				US07A5(6)MA	US09A5(6)MA
1	DB63-00086B	GUARD-FAN	HSWR, IP2, 5&3, SC-90073T, 375FAN	1	1
2	DB60-30004A	NUT-FLALNGE	2C, M6, SM20C, NTR	1	1
3	DB67-00036A	FAN-PROPELLER	AS+G/F20%, PI 375, BLK	1	1
4	DB31-10058G	MOTOR-FAN OUT	AMASS-020ZREA, FAN OUT, 115V/60Hz	1	1
5	DB90-00264A	ASS´Y FRAME (PAINT)	SC-90073T	1	1
6	DB94-00078A	ASS´Y PARTITION	ASS´Y 620mm COND	1	1
7	DB90-00077B	ASS´Y CABI-UPPER	ASS´Y	1	1
8	DB93-00424C	ASS´Y CONTROL OUT	ASS´Y	1	-
	DB93-00424B	ASS´Y CONTROL OUT	ASS´Y	-	1
8-1	2501-001226	C-OIL (COMP)	25µF, 370VAC	1	-
	2501-001230	C-OIL (COMP)	45µF, 370VAC	-	1
8-2	2301-001379	C-OIL (MOTOR)	4.0µF, 450VAC	1	1
8-3	DB33-00423A	ASS'Y LEAD WIRE	V2 P/D (105˚C)	1	1
8-5	DB65-40074A	TERMINAL BLOCK	5P, N, L, 1, 2, 3	1	1
9	DB72-00453A	CLOTH-COMP	T8, 425, 225, 44F COMP	1	1
10	44A072HW1EB	ROTARY COMP	1Ph, 115V/60Hz	1	-
	44B092HW1EL	ROTARY COMP	1Ph, 115V/60Hz	-	1
11	DB47-20001V	PROTECTOR O/L	MRA98706-12008	1	-
	DB47-20066E	PROTECTOR O/L	MRA12093-12007	-	1
12	DB73-10004A	GROMMET-ISOLATOR	EPDM	3	3
13	DB60-30018A	NUT-FLANGE	PI0.8, M5, SM20C	1	1
14	DB63-20002A	GASKET	EPDM, TO.8	1	1
15	DB63-10165D	COVER-TERMINAL	PBT	1	1
16	DB60-30028A	NUT-WASHER	HEX, 2C, M8, ZPC	3	3
17	DB96-00553B	ASS'Y TUBE CAPILLARY	ID1.42 x 800+1/4"	1	-
	DB96-00553A	ASS´Y TUBE CAPILLARY	ID1.5 x 900+1/4"	-	1
17-1	DB62-00254B	VALVE-SERVICE	1/4INCH	1	1
18	DB96-00615A	ASS'Y SUCTION	ASS'Y	1	-
	DB96-00245A	ASS´Y -SUCTION	ASS'Y	-	1
18-2	DB62-40073B	VALVE-SERVICE	3/8 INCH	1	1
19	DB96-00616A	ASS'Y DISCHARGE	ASS'Y	1	-
	DB96-00154A	ASS´Y -DISCHARGE	ASS´Y	-	1
20	DB75-00029B	ASS´Y COND	1.5D-FIN, 620mm	1	1
21	DB64-60171D	CABINET-SIDE	SECC-P, T 0.8, A-P/J	1	1
22	DB67-90024A	HANDLE-CABI LF	ABS	1	1
23	DB63-10443C	COVER-E, PARTS ASS'Y	SC-90073R	1	1

2 Single Type For 18K, 24K Models

2-1. Indoor Unit



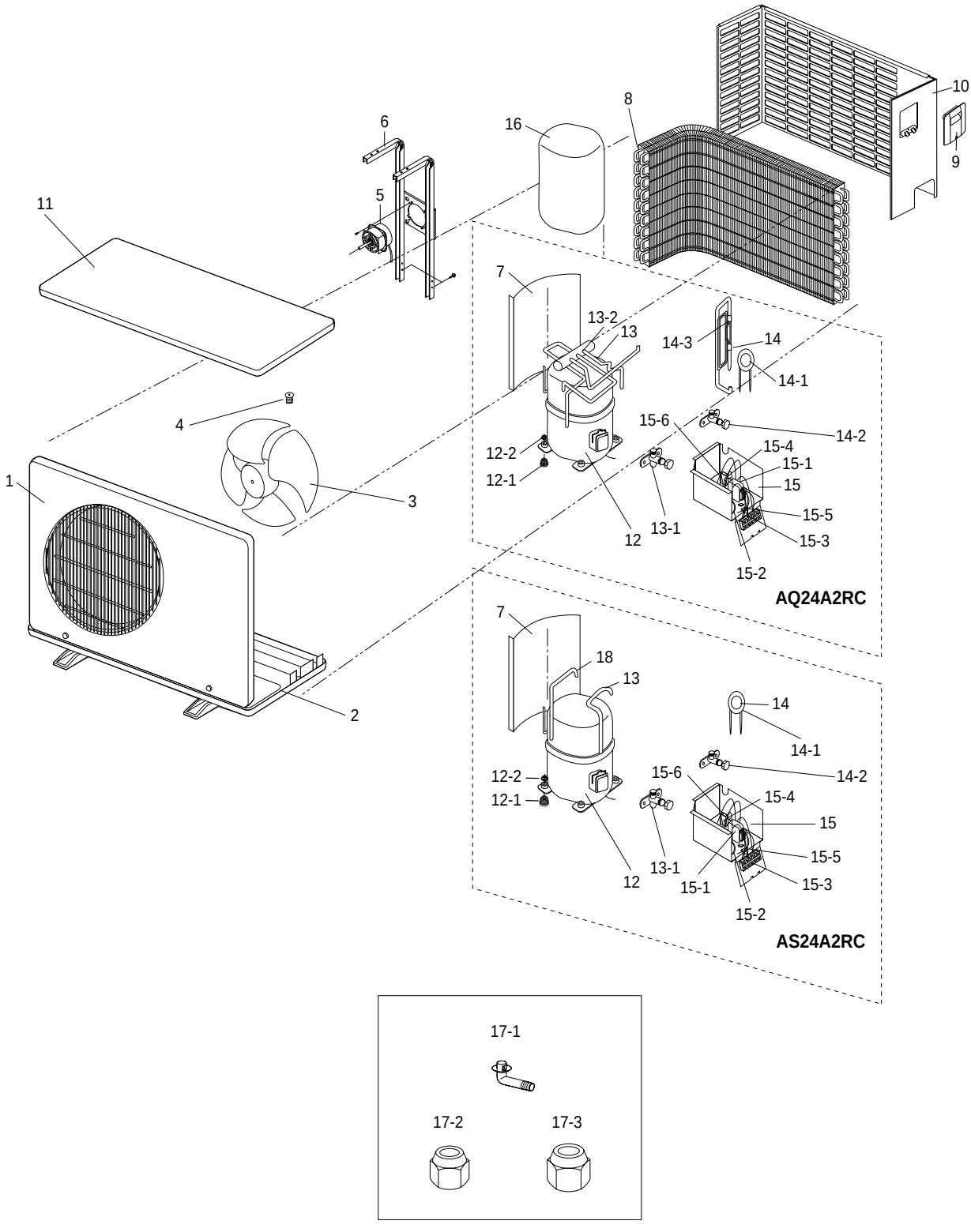
■ Parts List

No.	CODE NO	Description	Specification	Q'TY		Remark
				AQ24A2RC	AQ18A6RC	
1	DB92-00035Q	ASS'Y FRONT PANEL	ASS'Y	1	1	
1-1	DB64-00127A	GRILLE AIR INLET	HIPS	1	1	
1-2	DB64-00130B	PANEL FRONT	HIPS: SILVER SPRAY	1	1	
2	DB63-30150C	GUARD AIR FILTER	PP	2	2	
3	DB74-10101C	CLEANER FILTER ASS´Y	ASS'Y	1	1	
3-1	DB61-10164B	CASE-CLEANER FILTER	PP	2	2	
3-2	DB74-10082A	DEODORIZING FILTER	POLYESTER/CARBON	1	1	
3-3	DB74-10081A	CLEANER FILTER	POLYESTER/COTTON	1	1	
4	DB63-00091A	COVER TERMINAL	ABS(V0)	1	1	
5	DB70-00116A	PLATE-TERMINAL BLOCK	SGCC-M	1	1	
6	DB93-00311C	ASS´Y PCB DISPLAY	ASS'Y	1	1	
6-1	DB63-00115A	COVER DISPLAY	ABC(BLK)	1	1	
7	DB94-00029G	ASS´Y TRAY DRAIN	ASS´Y	1	1	
7-1	DB31-10153B	ASS´Y STEPING MOTOR	MP24S	1	1	
7-2	DB66-00104A	BLADE-H	ABS	1	1	
8	DB75-40087G	ASS´Y EVAP	PLATE1.2	1	-	
	DB75-40087H	ASS´Y EVAP	SLiT1.5	-	1	
9	DB67-30089E	SPACER-EVAP	PVC	1	1	
10	DB90-00140J	ASS´Y HOLDER MOTOR	ASS'Y	1	1	
10-1	DB61-00209A	HOLDER MOTOR	PP(Vo)	1	1	
10-2	DB65-10108A	CLIP EARTH WIRE	SECC	1	1	
10-3	DB65-00039A	TERMINAL BLOCK ASS´Y	5P,25A	1	1	
11	DB31-10151D	MOTOR FAN IN	IC-9430SKF7B	1	1	
12	DB94-00040J	ASS´Y-C-F-FAN	ø95 x L	1	1	
13	DB90-40135D	ASS´Y HOLDER BEARING	ASS'Y	1	1	
13-1	DB94-00074A	RUBBER BEARING	CR	1	1	
13-2	DB61-40244A	HOLDER BEARING	PP	1	1	
13-3	DB94-40007A	BEARING	PG5	1	1	
14	PD-TQ24A1R-00	ASS´Y MAIN PCB	PD-TQ24A1R-00	1	1	
15	DB32-00027B	ASS´Y-TERMISTOR	103AT	1	1	
16	DB61-10163A	CASE CONTROL	ABS(VO)	1	1	
17	DB94-20037F	ASS´Y BACK BODY	HIPS	1	1	
18	DB90-00163A	HOLDER PIPE	PP	1	1	
19	DB70-10663A	PLATE HANGER	SGCC-M	1	1	
20	DB63-00227A	COVER-TERMINAL BLOCK	ABS	1	1	

■ Parts List

No.	CODE NO	Description	Specification	Q'TY		Remark
				AS24A2RC	AS18A6RC	
1	DB92-00035A	ASS´Y FRONT PANEL	ASS'Y	1	1	
1-1	DB64-00127A	GRILLE AIR INLET	HIPS	1	1	
1-2	DB64-00130A	PANEL FRONT	HIPS	1	1	
2	DB63-30150C	GUARD AIR FILTER	PP	2	2	
3	DB74-10101C	CLEANER FILTER ASS'Y	ASS'Y	1	1	
3-1	DB61-10164B	CASE CLEANER FILTER	PP	2	2	
3-2	DB74-10082A	DEODORIZING FILTER	POLYESTER/CARBON	1	1	
3-3	DB74-10081A	CLEANER FILTER	POLYESTER/COTTON	1	1	
4	DB63-00091A	COVER TERMINAL	ABS(V0)	1	1	
5	DB70-00116A	PLATE-TERMINAL BLOCK	SGCC-NI	1	1	
6	DB93-00311C	ASS´Y PCB DISPLAY	ASS'Y	1	1	
6-1	DB63-00115A	COVER DISPLAY	ABS(BLK)	1	1	
7	DB94-00029G	ASS´Y TRAY DRAIN	ASS'Y	1	1	
7-1	DB31-10153B	ASS´Y STEPPING MOTOR	STEPPING	1	1	
7-2	DB66-00104A	BLADE-H	ABS	1	1	
8	DB75-40087G	ASS´Y EVAP	PLATE1.2(5/8")	1	-	
	DB75-40087F	ASS´Y EVAP	SLIT1.5(1/2")	-	1	
9	DB67-30089E	ASS'Y SPACER	PVC	1	1	
10	DB90-00140K	ASS´Y HOLDER MOTOR	ASS'Y	1	1	
10-1	DB61-00209A	HOLDER MOTOR	PP	1	1	
10-2	DB65-10108A	CLIP EARTH WIRE	SECC	1	1	
10-3	DB65-00039B	TERMINAL BLOCK ASS´Y	6P, 25A	1	1	
11	DB31-10151D	MOTOR FAN IN	IC-9430SKC7B	1	1	
12	DB94-00040J	ASS´Y C-F-FAN	ø95 x L	1	1	
13	DB90-40135D	ASS´Y HOLDER BEARING	ASS'Y	1	1	
13-1	DB94-00074A	RUBBER BEARING	CR	1	1	
13-2	DB61-40244A	HOLDER BEARING	PP	1	1	
13-3	DB94-40007A	BEARING	PG5	1	1	
14	PD-TQ24A1R-01	ASS´Y MAIN PCB	PD-TQ24A1R	1	1	
15	DB32-00027B	ASS´Y THERMISTOR	103AT	1	1	
16	DB-61-10163A	CASE CONTROL	ABS(VO)	1	1	
17	DB94-20037H	ASS'Y BACK BODY	HIPS	1	1	
18	DB90-00163A	HOLDER PIPE	PP	1	1	
19	DB70-10663A	PLATE HANGER	SGCC-M	1	1	
20	DB63-00227A	COVER-TERMINAL BLOCK	ABS	1	1	

2-2. Outdoor Unit(UQ24A2RC/US24A2RC)



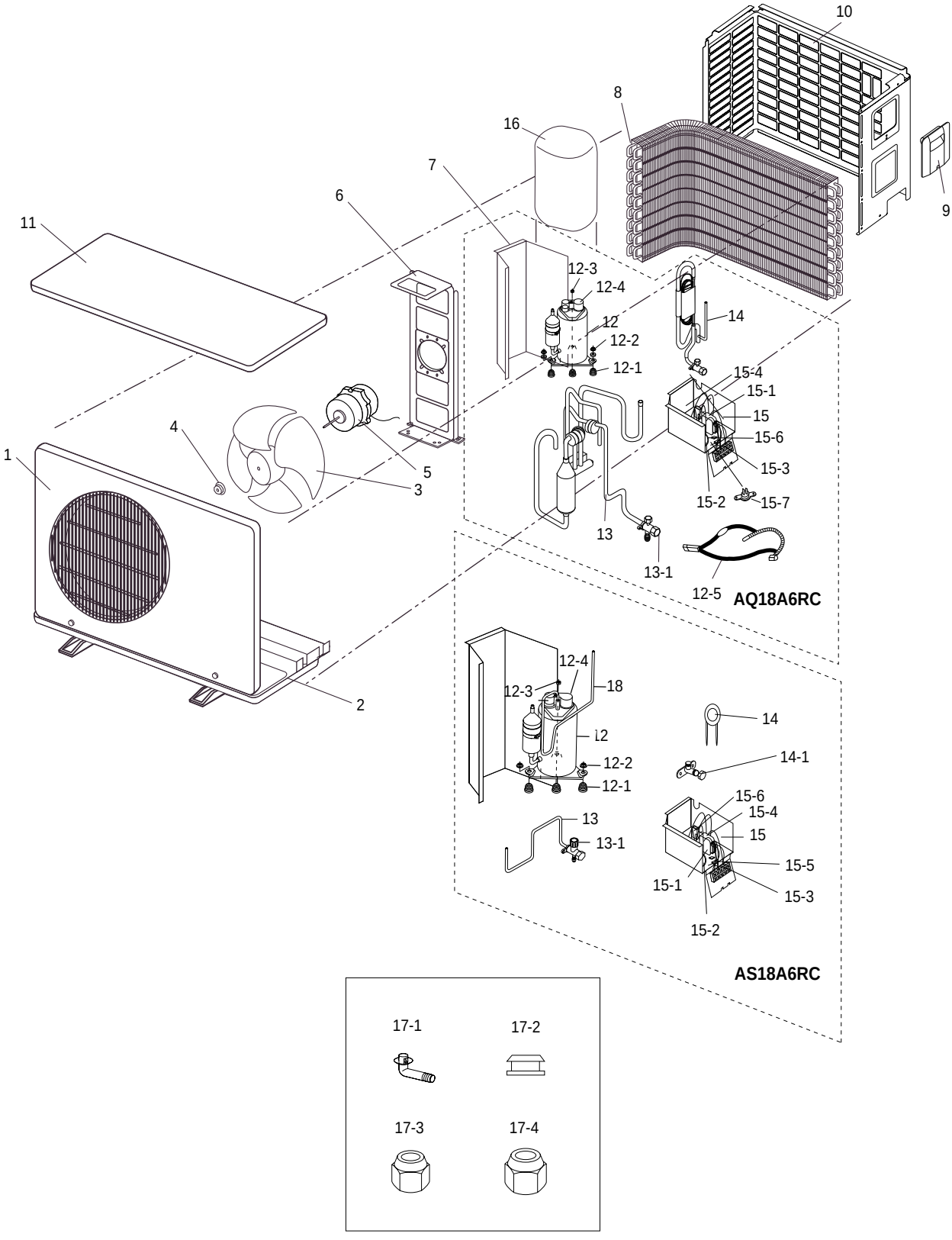
■ Parts List(24K)

No.	CODE NO	Description	Specification	Q'TY	Remark
				UQ24AZRC	
1	DB90-10634A	ASS'Y WELD FRONT	SC-90073T	1	
2	DB90-20210A	ASS'Y-BASE OUT	SC-90073T	1	
3	DB67-50074A	ASS'Y-FAN	AS+G/F20%	1	
4	DB60-20020A	BOLT SPECIAL	M8 L25	1	
5	DB31-00027F	MOTOR FAN OUT	OSM-906SRC	1	
6	DB95-20147A	ASS'Y-MOTOR B/K	SGCC-M	1	
7	DB94-50039C	PARTITION	SGCC-M	1	
8	DB75-30102F	ASS'Y-CONDENSER	ASS'Y	1	
9	DB90-40176B	COVER-CONTROL	ABS(V5)	1	
10	DB64-60160B	CABI SIDE OUT	SC-90073T	1	
11	DB90-10616A	TOP COVER	SC-90073T	1	
12	DB95-10339G	COMPRESSOR	H29B26UABCA	1	
12-1	DB73-10004A	GROMMET ISOLATOR	EPDM	4	
12-2	DB60-00028A	NUT WASHER	M8	4	
13	DB99-10149A	ASS'Y-4WAY V/V	ASS'Y	1	
13-1	DB62-40055F	PACKED V/V 15.88"	20LT/MIN	1	
13-2	DB62-40036A	4WAY V/V	CHV-0201	1	
14	DB99-10138E	ASS'Y-CHECK V/V	ASS'Y	1	
14-1	DB62-31798C	TUBE CAPI(C)	C1220T-O	1	
	DB62-31798D	"	"	-	
14-2	DB62-40039C	PACKED V/V 6.35"	6.35 INCH	1	
14-3	DB62-31802B	TUBE CAPI(H)	C1220T-O	1	
15	DB93-00306F	ASS'Y CONTROL OUT	ASS'Y	1	
15-1	DB34-90054B	SWITCH MAGNET	41NB21AG	1	
15-2	2501-001194	CAPACITOR	35μFx450VAC	1	
15-3	DB65-00040A	TERMINAL BLOCK	8P/35A	1	
15-4	DB95-90026B	SPARK KILLER	-	1	
15-5	3601-000236	FUSE	2A,250V	1	
15-6	2501-000398	MOTOR CAPACITOR	4μF/450VAC	1	
16	DB72-50622A	CLOTH SOUND COMP	-	1	
17-1	DB67-20011A	DRAIN PLUG OUT	PP	1	
17-2	DB60-30010A	NUT FLANGE 6.35"	C3771BD	2	
17-3	DB60-30010D	NUT FLANGE 15.88"	C3771BD	2	

■ Parts List

No.	CODE NO	Description	Specification	Q'TY	Remark
				US24A2RC	
1	DB90-10634A	ASS'Y WELD FRONT	SC-90073T	1	
2	DB90-20210A	ASS'Y-BASE OUT	SC-90073T	1	
3	DB67-50074A	ASS'Y-FAN	AS+G/F20%	1	
4	DB60-20020A	BOLT SPECIAL	M8 L25	1	
5	DB31-00027F	MOTOR FAN OUT	OSME-906SRC	1	
6	DB95-20147A	ASS'Y-MOTOR B/K	SGCC-M	1	
7	DB94-50039C	PARTITION	SGCC-M	1	
8	DB75-30102F	ASS'Y-CONDENSER	ASS'Y	1	
9	DB90-40176B	COVER-CONTROL	ABS(V5)	1	
10	DB64-60160B	CABI SIDE OUT	SC-90073T	1	
11	DB90-10616A	TOP COVER	SC-90073T	1	
12	DB95-10339F	COMPRESSOR	H29B26UABCA	1	
12-1	DB73-10004A	GROMMET ISOLATOR	EPDM	4	
12-2	DB60-00028A	NUT WASHER	M8	4	
13	DB96-10637A	ASS'Y SUCTION	ASS'Y	1	
13-1	DB62-40055F	PACKED V/V 15.88"	20LT/MIN	1	
14	DB96-10635A	ASS'Y-TUBE CAPI	ASS'Y	1	
14-1	DB62-31842B	TUBE CAPI(C)	ID 1.7 x 900 x 2	1	
14-2	DB62-40039C	PACKED V/V 6.35"	6.35 INCH	1	
15	DB93-00306E	ASS'Y CONTROL OUT	ASS'Y	1	
15-1	DB34-90057A	SWITCH MAGNET	45CG20AGB	1	
15-2	2501-001194	COMPOR CAPACITOR	35µFx450VAC	-	
15-3	DB65-00040A	TERMINAL BLOCK	8P/35A	1	
15-4	DB95-90026B	SPARK KILLER	-	1	
15-5	3601-000236	FUSE	2A, 250V	1	
15-6	2501-000389	MOTOR CAPACITOR	4µF x 450VAC	1	
16	DB72-50622A	CLOTH SOUND	-	1	
17-1	DB60-30010A	NUT FLANGE 6.35"	G3771BD	2	
17-2	DB60-30010D	NUT FLANGE 15.88"	G3771BD	2	
18	DB96-10670A	TUBE-DISCHARGE	-	1	

2-3. Outdoor Unit(UQ18A6RC/US18A6RC)



■ Parts List(18K)

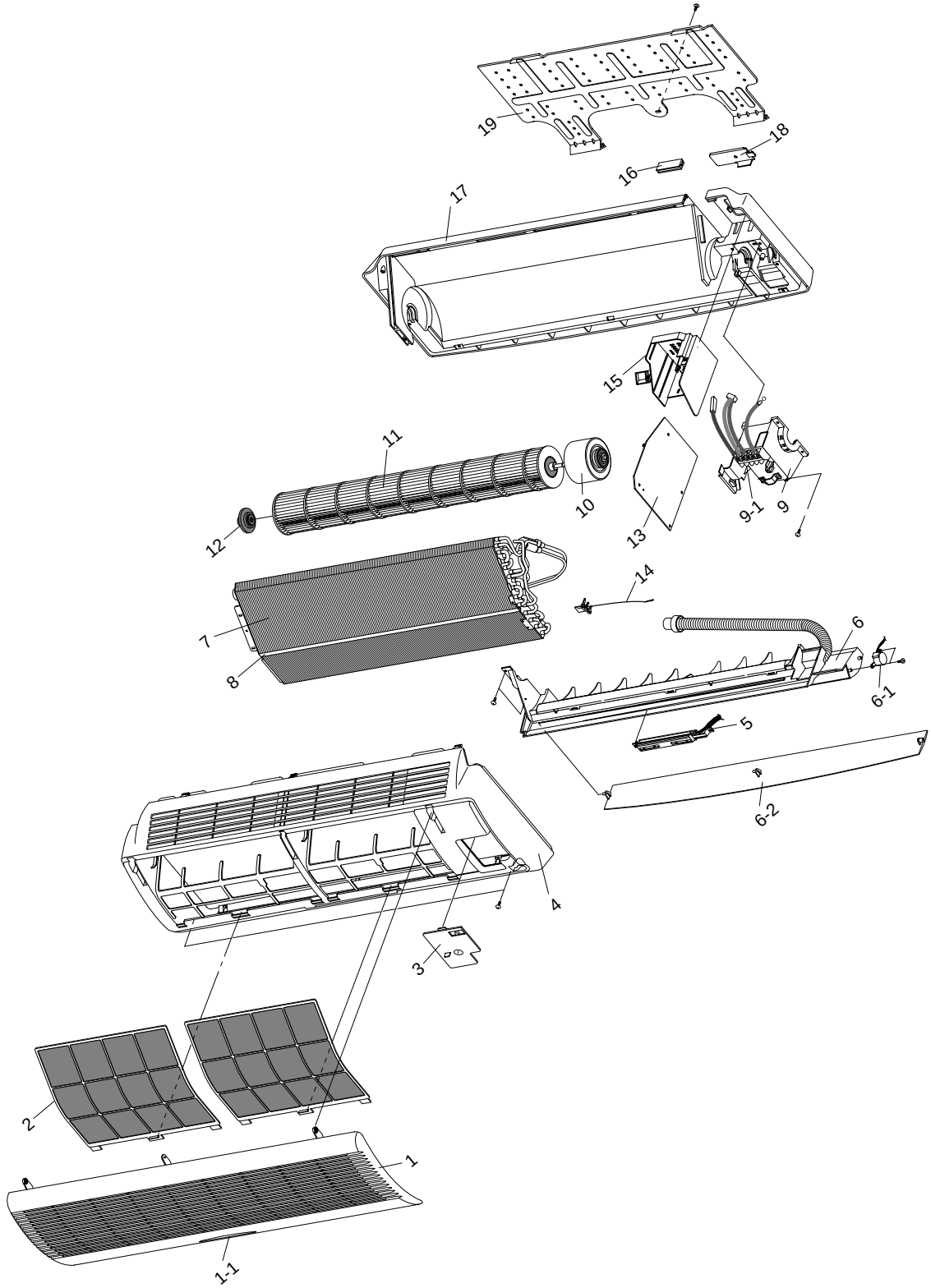
No.	CODE NO	Description	Specification	Q'TY	Remark
				UQ18A6RC	
1	DB90-00260A	ASS'Y-WELD FRONT	SC-90073T	1	
2	DB90-20210B	ASS'Y-BASE OUT	SC-90073T	1	
3	DB67-50063A	ASS'Y-FAN	AS+G/F20%	1	
4	DB60-30020A	NET FLANGE	M6LF	1	
5	DB31-10119C	MOTOR FAN OUT	ASS035ZTEE	1	
6	DB61-20008C	BASE-MOTOR	SGCC-M	1	
7	DB94-00080A	PARTITION	SGCC-M	1	
8	DB75-00058A	ASS'Y-CONDENSER	ASS'Y	1	
9	DB90-40176B	COVER-CONTROL	ABS(V5)	1	
10	DB64-60160C	ASS'Y-CABI BACK	SC-90073T	1	
11	DB90-10616D	TOP COVER	SC-90073T	1	
12	48B190JVIEH	COMPRESSOR	48B190JVIEH	1	
12-1	DB73-00067A	GROMMET ISOLATOR	NR, BLK	3	
12-2	DB60-30028A	NUT WASHER	M8	3	
12-3	DB60-30018A	NUT FLANGE	M5	1	
12-4	DB63-10165D	COVER-TERMINAL	PBT, GRY	1	
12-5	DB95-00212A	ASS'Y-HEATER	240V, 45W	1	
13	DB99-00087B	ASS'Y-4WAY V/V	ASS'Y	1	
13-1	DB62-40022A	PACKED V/V 1/2"	10LT/MIN	1	
14	DB99-00088A	ASS'Y-CHECK V/V	ASS'Y	1	
15	DB93-00415F	ASS'Y CONTROL OUT	ASS'Y	1	
15-1	DB34-90057A	SWITCH MAGNET	45CG20AGB	1	
15-2	2501-001238	CAPACITOR	40/450VAC	1	
15-3	DB65-00040A	TERMINAL BLOCK	8P/20A	1	
15-4	DB95-90026B	SPARK KILLER	ASS'Y	1	
15-5	3601-000236	FUSE	2A,250V	1	
15-6	2501-001370	MOTOR CAPACITOR	2.5μF/450VAC	1	
15-7	DB32-00007A	THERMOSTAT	PW 2N	1	
16	DB72-50622A	CLOTH SOUND	-	1	
17-1	DB67-20011A	DRAIN PLUG OUT	PP	1	
17-2	DB63-10355C	CAP DRAIN	CR	1	
17-3	DB60-30010A	NUT FLANGE 1/4"	C3771BD	2	
17-4	DB60-30010C	NUT FLANGE 1/2"	C3771BD	2	

■ Parts List

No.	CODE NO	Description	Specification	Q'TY	Remark
				US18A6RC	
1	DB90-00260A	ASS'Y-CABI FRONT	SC-90073T	1	
2	DB90-20210B	ASS'Y-BASE OUT	SC-90073T	1	
3	DB67-50074A	ASS'Y-FAN	AS+G/F20%	1	
4	DB60-20020A	BLOT SPECIAL	M8L25	1	
5	DB31-10119C	MOTOR FAN OUT	ASS035ZTEE	1	
6	DB95-20147A	ASS'Y-MOTOR B/K	SGCC-M	1	
7	DB94-00080A	PARTITION	SGCC-M	1	
8	DB75-00058B	ASS'Y-CONDENSER	ASS'Y	1	
9	DB90-40176B	COVER-CONTROL	ABS(V5)	1	
10	DB64-60160B	CABI SIDE OUT	SC-90073T	1	
11	DB90-10616D	TOP COVER	SC-90073T	1	
12	48B190JV1EH	COMPRESSOR	48B190JV1EH	1	
13	DB96-00504A	ASS'Y-SUCTION	ASS'Y	1	
13-1	DB62-40022A	PACKED V/V 12.7"	10LT/MIN, 1/2"	1	
14	DB96-00502B	ASS'Y-TUBE CAPI	ASS'Y	1	
14-1	DB62-40039C	PACKED V/V 6.35"	6.35 INCH	1	
15	DB93-00416F	ASS'Y CONTROL OUT	ASS'Y	1	
15-1	DB34-90057A	SWITCH MAGNET	45CG20ALB	1	
15-2	2501-001238	CAPACITOR COMP	40μF x 450VAC	1	
15-3	DB65-00040A	TERMINAL BLOCK	8P, 35A	1	
15-4	DB95-90026B	SPARK KILLER	-	1	
15-5	3601-000236	FUSE	2A, 250V	1	
15-6	2501-001370	CAPACITOR MOTOR	2.5μF x 450VAC	1	
16	DB72-50615A	CLOTH SOUND	-	1	
17-1	DB60-30010A	NUT FLANGE 6.35"	C3771BD	1	
17-2	DB60-30010D	NUT FLANGE 15.88"	C3771BD	1	
18	DB96-00503A	TUBE-DISCHARGE	-	1	

3 Multi Type

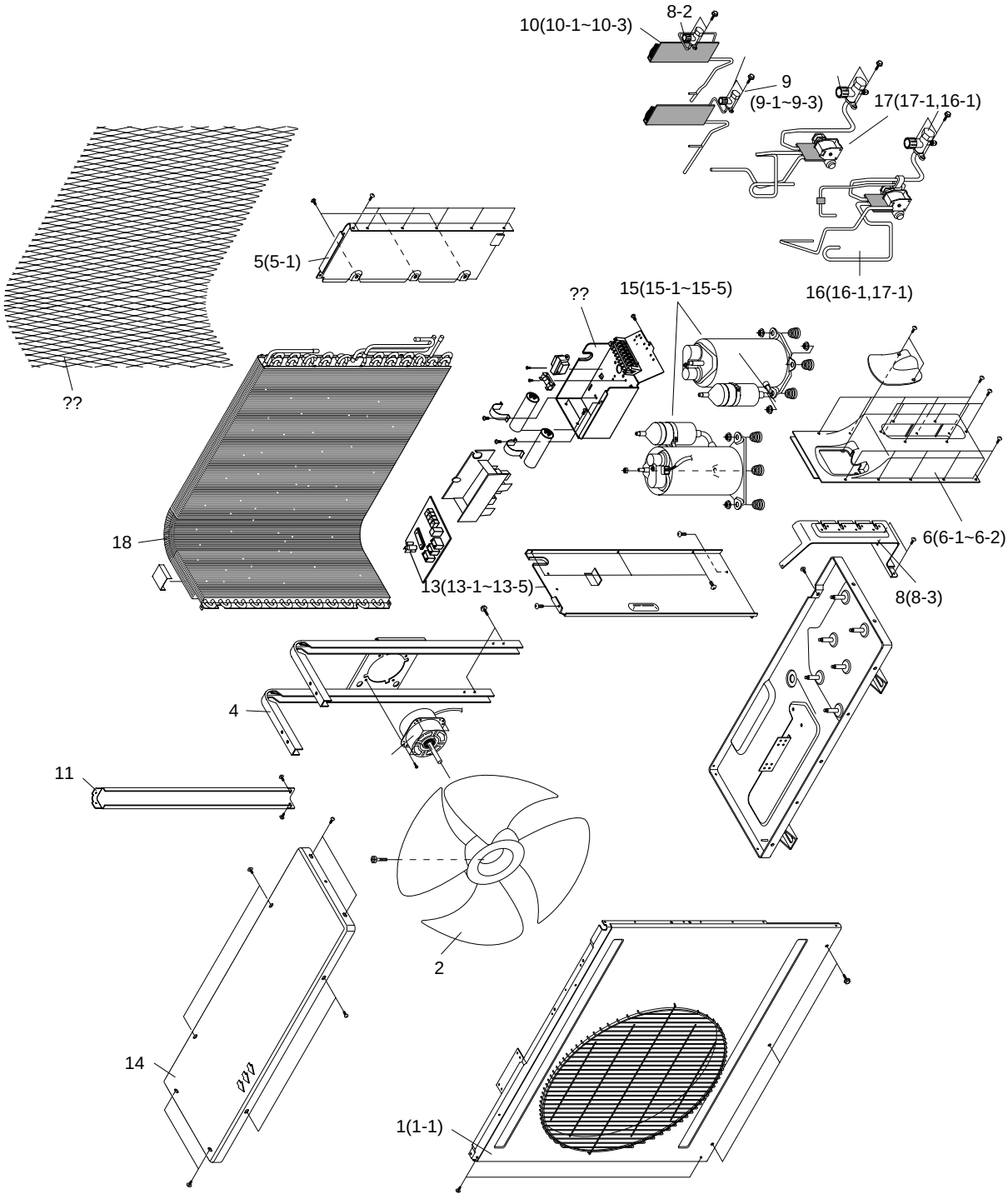
3-1. Indoor Unit



■ Parts List

No.	CODE NO	Description	Specification	Q'TY					
				AD18A1C09	AD26A1C13	AM26A1C13	AM18A1C09	AM27A1C07	AM27A1C13
1	DB64-10140A	GRILLE AIR INLET	ABS	1	1	1	1	1	1
1-1	DB64-70073A	PANEL CENTER DISPLAY	PC	1	1	1	1	1	1
2	DB63-30131A	GUARD AIR FILTER	PP	2	2	2	2	2	2
3	DB63-10472B	COVER TERMINAL	HIPS	1	1	1	1	1	1
4	DB92-70075E	ASS'Y FRONT PANEL	ASS'Y	1	1	1	1	1	1
5	DB93-10560B	ASS'Y DISPLAY PCB	ASS'Y(EDGE)	1	1	1	1	1	1
6	DB94-10088B	ASS'Y TRAY DRAIN	ASS'Y	1	1	1	1	1	1
6-1	DB95-20138A	ASS'Y STEP MOTOR U/D	DC12V.600GR	1	1	1	1	1	1
6-2	DB66-30153A	BLADE-H	HIPS	1	1	1	1	1	1
7	DB75-40095A	ASS'Y EVAP	ASS'Y	-	1	1	-	-	1
	DB75-40095B	ASS'Y EVAP	ASS'Y	1	-	-	1	1	-
8	DB67-30058C	SPACER EVAP	PVC	1	1	1	1	1	1
9	DB61-10011B	ASS'Y HOLDER MOTOR	ASS'Y	1	1	1	1	1	1
9-1	DB65-00007A	ASS'Y TERMINAL BLOCK	ASS'Y	1	1	1	1	1	1
10	DB31-10078H	MOTOR FAN IN	AMPFS040WTVB	1	1	1	1	1	1
11	DB94-30141A	ASS'Y-C-F-FAN	95 x 619.4mm	1	1	1	1	1	1
12	DB94-40017A	ASS'Y BEARING	ASS'Y	1	1	1	1	1	1
13	DB93-10626A	ASS'Y MAIN PCB	ASS'Y	1	-	1	-	1	-
	DB93-10626B	ASS'Y MAIN PCB	ASS'Y	-	1	-	1	-	1
14	DB32-10008D	ASS'Y-TERMISTOR	ASS'Y	1	1	1	1	1	1
15	DB63-10427B	COVER TERMINAL	ABS	1	1	1	1	1	1
16	DB61-60093A	BODY-BUSH	HIPS	1	1	1	1	1	1
17	DB94-20030C	ASS'Y BACK BODY	ASS'Y	1	1	1	1	1	1
18	DB61-40247A	HOLDER PIPE	HIPS	1	1	1	1	1	1
19	DB70-10618A	PLATE HANGER	SGCC-M	1	1	1	1	1	1

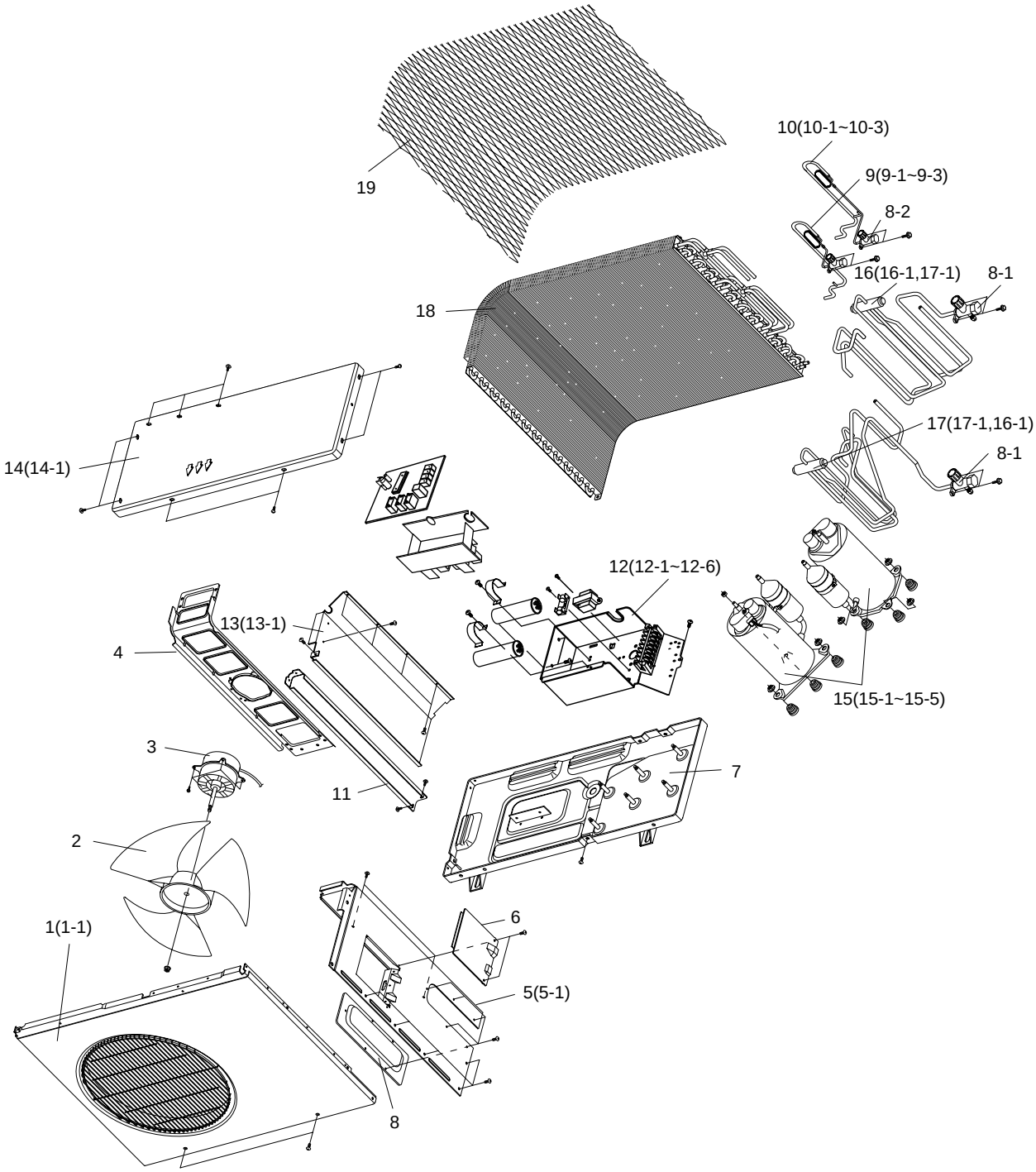
3-2. Outdoor Unit(UD26A1C2/UM26A1C2/UM27A1C3)



■ Parts List

No.	CODE NO	Description	Specification	Q'TY			Remark
				UD18A1C2	UM18A1C2	UM27A1C3	
1	DB90-10163D	ASS'Y-WELD FRONT	SC-90073T	1	1	1	
1-1	DB72-50520A	INSUL FRONT OUT	FOAM PU + FOAM PE	1	1	1	
2	DB67-50067A	FAN-PROPELLER	AS+G/F20%	1	1	1	
3	DB31-10083A	MOTOR-FAN OUT	OSM-736SRC	1	1	1	
4	DB61-20093A	BASE-MOTOR	SGCC-M	1	-	-	
	DB61-20094A	BASE-MOTOR	SGCC-M	-	1	1	
5	DB64-60134B	CABINET-SIDE	SECC-P	1	1	1	
5-1	DB72-60053A	INSUL SIDE CABI	FOAM PU + FOAM PE	1	1	1	
6	DB90-40120A	ASS'Y-COVER VALVE	ASS'Y	1	1	1	
6-1	DB63-10433A	COVER-CONTROL	PP	1	1	1	
6-2	DB63-10434A	COVER-VALVE	pp	1	1	1	
7	DB90-20207A	ASS'Y-BASE OUT	AD26A1C2	1	1	1	
8	DB99-10160A	ASS'Y-VALVE	AD26A1C2	1	-	1	
	DB99-10174A	ASS'Y-VALVE	AM26A1C2	1	1	-	
	DB99-10176A	ASS'Y-VALVE	AM27A1C3	1	1	1	
8-1	DB62-40101A	VALVE-PACKED 1/2"	1/2"	2	2	2	
	DB62-40074C	VALVE-PACKED 1/2"	1/2"	-	-	2	
8-2	DB62-40099A	VALVE-PACKED 1/4"	1/4"	2	2	-	
	DB62-40102A	VALVE-PACKED 1/4"	1/4"	-	-	-	
8-3	DB61-30510A	BRACKET-VALVE	SC-90073T	1	1	-	
8-4	DB62-40073B	VALVE-PACKED 3/8"	3/8"	-	-	1	
9	DB99-10163A	ASS'Y CHECK V/V, A	ASS'Y	1	-	-	
9-1	DB62-40034A	VALVE CHECK	30kg/m2G	1	-	-	
9-2	DB62-31965A	TUBE CAPI (C)	ID 1.7 x 900	1	1	-	
	DB96-10724A	TUBE CAPI (B)	ASS'Y	-	-	-	
	DB96-10725A	TUBE CAPI (C)	ASS'Y	1	1	-	
9-3	DB62-31966A	TUBE CAPI (H)	ID 1.7 x 550	1	-	-	
10	DB99-10164A	ASS'Y CHECK V/V, B	ASS'Y	1	-	1	
10-1	DB62-40034A	VALVE CHECK	30kg/m2G	1	-	-	
10-2	DB62-31965A	TUBE CAPI (C)	ID 1.7 x 900	1	1		
10-3	DB62-31966A	TUBE CAPI (H)	ID 1.7 x 550	1	-		
11	DB63-30027C	GUARD-COND	SC-90073T	1	1		
12	DB93-40888A	ASS'Y CONTROL OUT	UD26A1C2	1	-		
	DB93-40886A	ASS'Y CONTROL OUT	UM26A1C2	-	1		
	DB93-40890A	ASS'Y CONTROL OUT	AM27A1C3	1	1		
12-1	DB61-10199A	CASE CONTROL OUT	SGCC-M	1	1	1	
12-2	DB61-10200A	CASE PCB OUT	AD18A1C2	1	-	-	
12-3	2501-001158	C-OIL	25μF450V	2	2	2	
12-4	DB65-40072A	TERMINAL BLOCK	8P	1	1	-	
	DB65-40072C	TERMINAL BLOCK	8P	1	-	1	
12-5	2501-000398	C-OIL	4μF450V	1	1	1	
12-6	DB93-10621A	ASS'Y-PCB MAIN OUT	UD26A1C2	1	-	-	
	DB93-10617A	ASS'Y-PCB MAIN OUT	UM27A1C3	-	-	1	
13	DB94-50041A	ASS'Y-PARTITION	ASS'Y	1	1	1	
13-1	DB72-60099A	INSUL PARTITION	FOAM PE + FOAM PU	1	1	1	
13-2	DB67-30083A	PARTITION	SGCC-M	1	1	1	
14	DB63-10213C	COVER-TOP	SECC-P	1	1	1	
15	DB95-10063D	ASS'Y-COMP	48H135IV1E5	2	2	2	
15-1	DB73-10004A	GROMMET-ISOLATOR	EPDM	6	6	6	
15-2	DB60-30028A	NUT-WASHER	M8	6	6	6	
15-3	DB60-30018A	NUT-FLANGE	P10.8	2	2	2	
15-4	DB63-10165B	COVER-TERMINAL	NORYL	2	2	2	
15-5	DB47-20001G	OLP	MRA12002-9200	2	2	2	
16	DB99-10161A	ASS'Y 4-WAY V/V, A	ASS'Y	1	-	1	
16-1	DB62-40035A	4-WAY VALVE	SAGINOMIYA	2	-	1	
17	DB99-10162A	ASS'Y 4-WAY V/V, B	ASS'Y	1	-	1	
17-1	DB62-40035A	SOLENOID-V/V	ASS'Y	2	-	-	
	DB27-10034A	SOLENOID-V/V B	ASS'Y	-	-	-	
	DB27-10034B	SOLENOID-V/V C	SAGINOMIYA	-	-	1	
18	DB75-30109A	CONDENSER	ASS'Y	1	1	1	
	DB75-30108A	CONDENSER	ASS'Y	-	1	1	
19	DB63-30110J	SCREEN-GUARD	P.E.H 100%	1	-	1	

3-3. Outdoor Unit(UD18A1C2/UM18A1C2)



■ Parts List

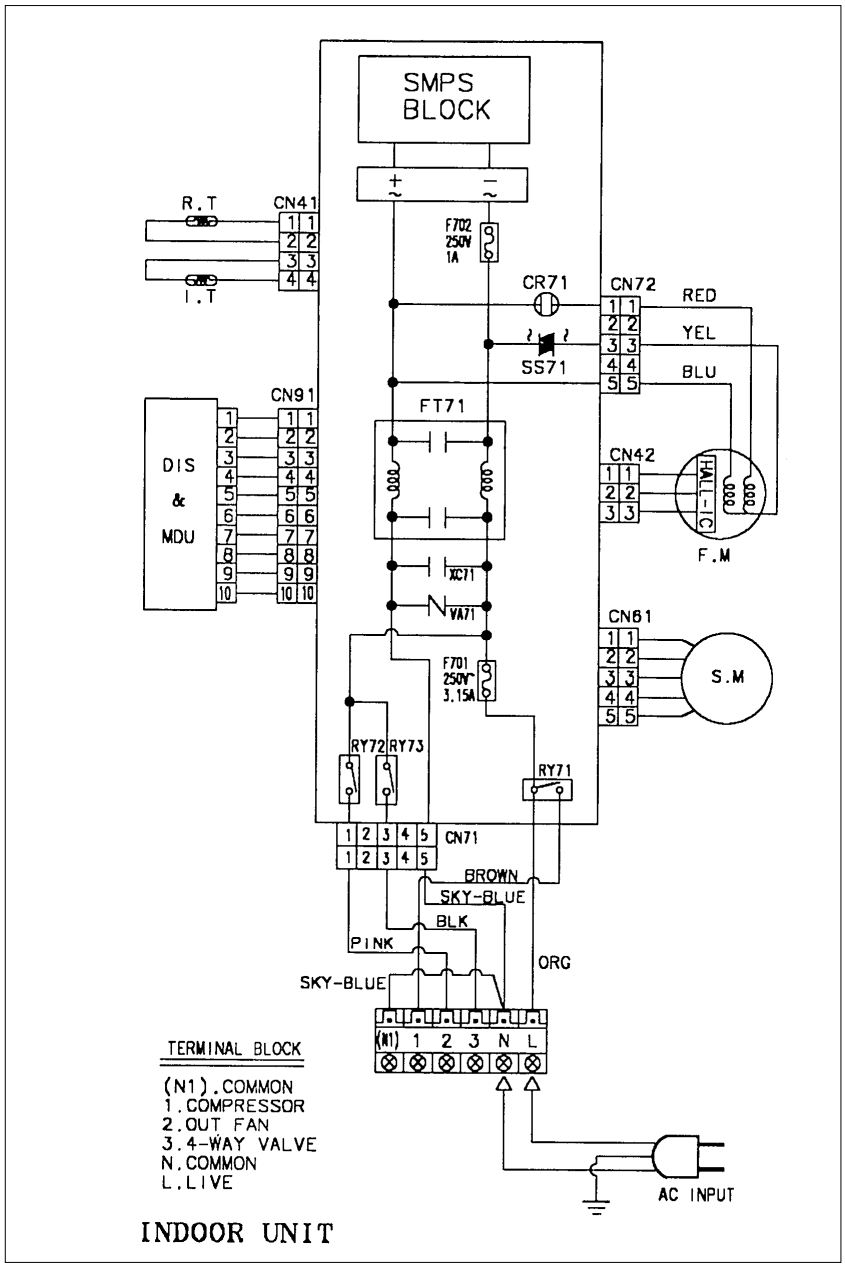
No.	CODE NO	Description	Specification	Q'TY		Remark
				UD18A1C2	UM18A1C2	
1	DB90-10153J	ASS'Y-WELD FRONT	SC-90073J	1	1	
1-1	DB72-60034A	INSUL FRONT	FOAM PU	1	1	
2	DB67-50063A	FAN-PROPELLER	AS+G/F20%	1	1	
3	DB31-00001A	MOTOR-FAN OUT	IC-9630SLF6J	1	1	
4	DB61-20008C	BASE-MOTOR	SGCC-M	1	1	
5	DB64-60130B	CABINET-SIDE	SECC-P	1	-	
	DB64-60130A	CABINET-SIDE	SECC-P	-	1	
6	DB90-40168A	ASS'Y COVER-CONTROL	94-5V	1	-	
	DB90-40168B	ASS'Y COVER-CONTROL	94-5V	-	1	
7	DB90-20211A	ASS'Y-BASE OUT	AD18A1C2	1	1	
8	DB99-10168A	ASS'Y-VALVE	AD18A1C2	1	-	
	DB99-10064A	ASS'Y-VALVE	AM18A1C2	-	1	
8-1	DB62-40095A	VALVE-PACKED 3/8"	3/8"	2	2	
8-2	DB62-40094A	VALVE-PACKED 1/4"	1/4"	2	2	
8-3	DB62-31368A	TUBE CAPI-C	ID 1.5 x 800	-	2	
9	DB99-10169A	ASS'Y CHECK V/V, A	ASS'Y	1	-	
9-1	DB62-40034A	VALVE CHECK	30kg/m^2G	1	-	
9-2	DB62-31965B	TUBE CAPI (C)	ID 1.5 X 900	1	-	
9-3	DB62-31966A	TUBE CAPI (H)	ID 1.7 X 550	1	-	
10	DB99-10170A	ASS'Y CHECK V/V, B	ASS'Y	1	-	
10-1	DB62-40034A	VALVE CHECK	30kg/m^2G	1	-	
10-2	DB62-31965B	TUBE CAPI (C)	ID 1.5 X 900	1	-	
10-3	DB62-31966A	TUBE CAPI (H)	ID 1.7 X 550	1	-	
11	DB63-30025D	GUARD-COND	SC-90073T	1	1	
12	DB93-40889A	ASS'Y CONTROL OUT	AD18A1C2	1	-	
	DB93-40887A	ASS'Y CONTROL OUT	AM18A1C2	-	1	
12-1	DB61-10199A	CASE CONTROL OUT	SGCC-M	1	1	
12-2	DB61-10200A	CASE PCB OUT	AD18A1C2	1	-	
12-3	2501-001157	C-OIL	20μF X 450V	2	2	
12-4	DB65-40072A	TERMINAL BLOCK	8P	1	1	
12-5	2501-001066	C-OIL	2.5μF X 450V	1	1	
12-6	DB93-10621A	ASS'Y-PCB MAIN OUT	AD18A1C2	1	-	
13	DB94-50036A	ASS'Y PARTITION	ASS'Y	1	1	
13-1	DB72-60034B	INSUL PARTITION	FOAM PE+FOAM PU	1	1	
14	DB63-10011A	COVER-TOP	SECC-P	1	1	
15	DB95-10065X	ASS'Y-COMP	44B092IW1E6	2	2	
15-1	DB73-10004A	GROMMET-ISOLATOR	EPDM	6	6	
15-2	DB60-30028A	NUT-WASHER	M8	6	6	
15-3	DB60-30018A	NUT-FLANGE	P10.8	2	2	
15-4	DB63-10165B	COVER-TERMINAL	NORYL	2	2	
15-5	DB47-20002A	OLP	MRA12032-12008	2	2	
16	DB99-10150A	ASS'Y 4-WAY V/V, A	AD18A1C2	1	-	
16-1	DB62-40035A	4-WAY VALVE	SAGINOMIYA	1	-	
17	DB99-10151A	ASS'Y 4-WAY V/V, B	AD18A1C2	1	-	
17-1	DB62-40035A	SOLENOID-V/V	SAGINOMIYA	1	-	
18	DB75-30110A	CONDENSER	ASS'Y	1	-	
	DB96-30296A	CONDENSER	ASS'Y	-	1	
19	DB75-30130B	SCREEN-GUARD	P.E.H 100%	1	1	

13 Wiring Diagrams

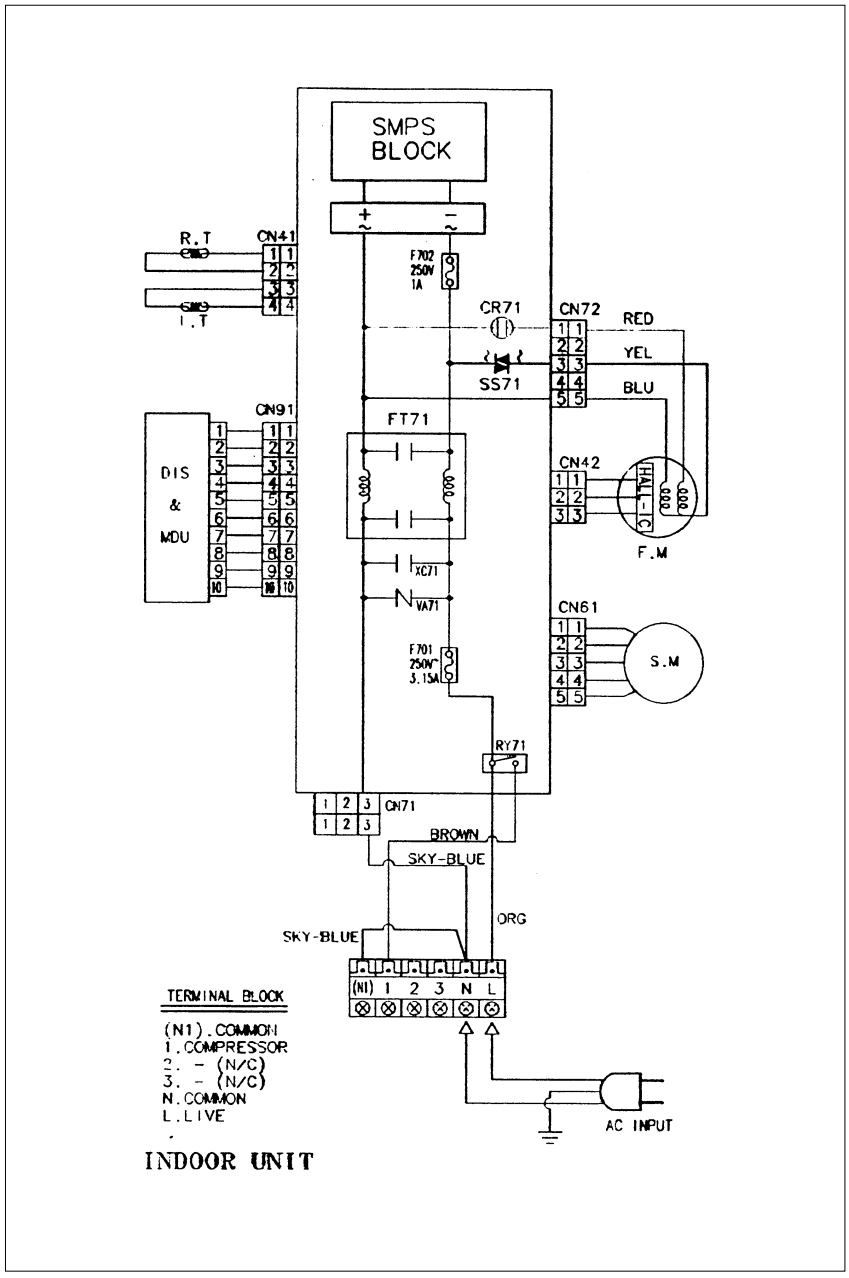
1 Single Type For 7K, 9K, 12K Models

1-1. Indoor Unit

■ **AQ✻✻A6M✻**



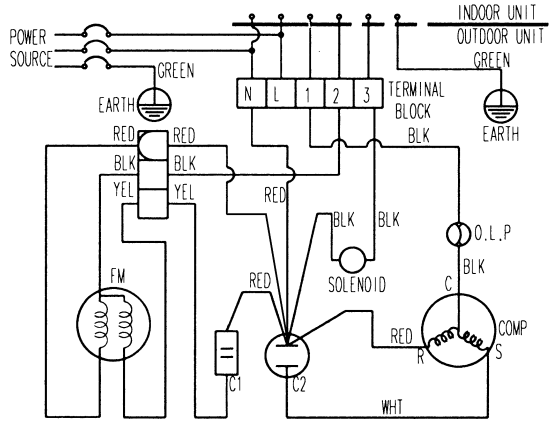
■ AS✳✳A6M✳


SMPS BLOCK
+
~
−
~
R.T
I.T
CN41
F702 250V 1A
CR71
CN72
RED
YEL
BLU
SS71
CN91
DIS & MDU
FT71
CN42
F.M
XC71
VA71
CN61
S.M
F701 250V 3.15A
RY71
CN71
BROWN
SKY-BLUE
ORG
SKY-BLUE
(N1) 1 2 3 N L
TERMINAL BLOCK
(N1).COMMON
1.COMPRESSOR
2. - (N/C)
3. - (N/C)
N.COMMON
L.LIVE
AC INPUT
INDOOR UNIT

1-2. Outdoor Unit

■ UQ09A5(6)MA

DIAGRAM-OUTDOOR

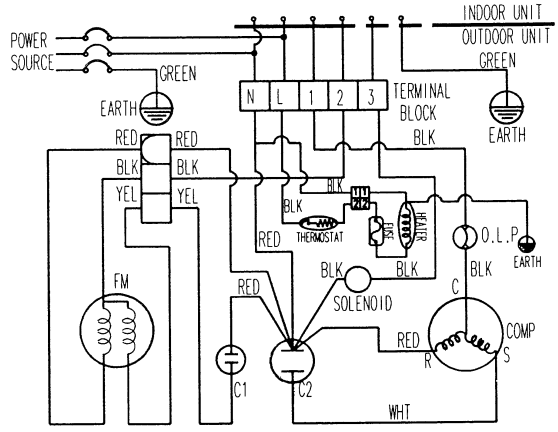


C1 : MOTOR CAPACITOR
C2 : COMP CAPACITOR

C1 : 4μF X 450VAC C2 : 45μF x 370VAC

■ UQ12A5(6)MC

DIAGRAM-OUTDOOR

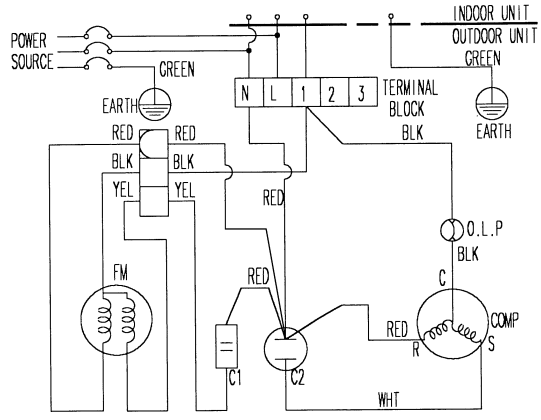


C1 : MOTOR CAPACITOR
C2 : COMP CAPACITOR

C1 : 1.5μF X 450VAC C2 : 25μF x 370VAC

■ US07A5(6)MA

DIAGRAM-OUTDOOR

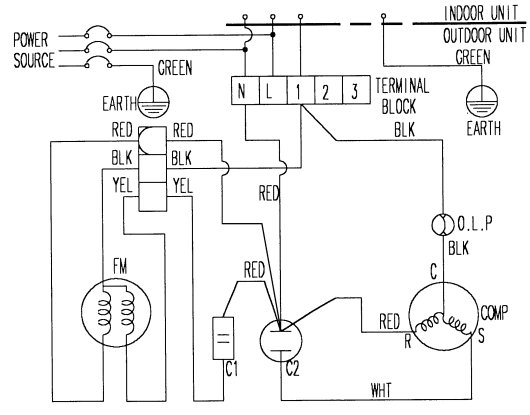


C1 : MOTOR CAPACITOR
C2 : COMP CAPACITOR

C1 : 4μF x 450VAC C2 : 25μF x 370VAC

■ US09A5(6)MA

DIAGRAM-OUTDOOR

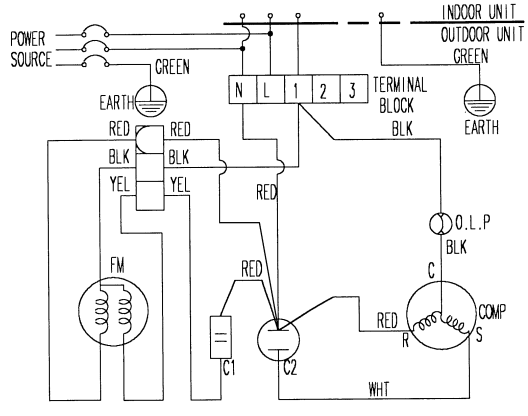


C1 : MOTOR CAPACITOR
C2 : COMP CAPACITOR

C1 : 4μF x 450VAC C2 : 45μF x 370VAC

■ US12A5(6)MC

DIAGRAM-OUTDOOR



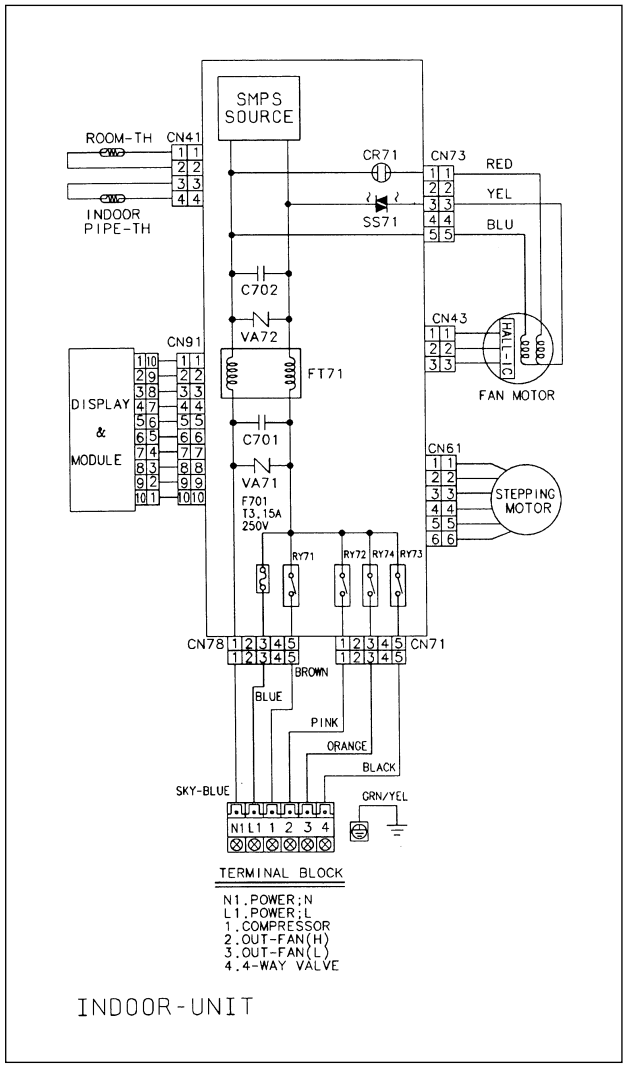
C1 : MOTOR CAPACITOR
C2 : COMP CAPACITOR

C1 : 1.5μF x 450VAC C2 : 25μF x 370VAC

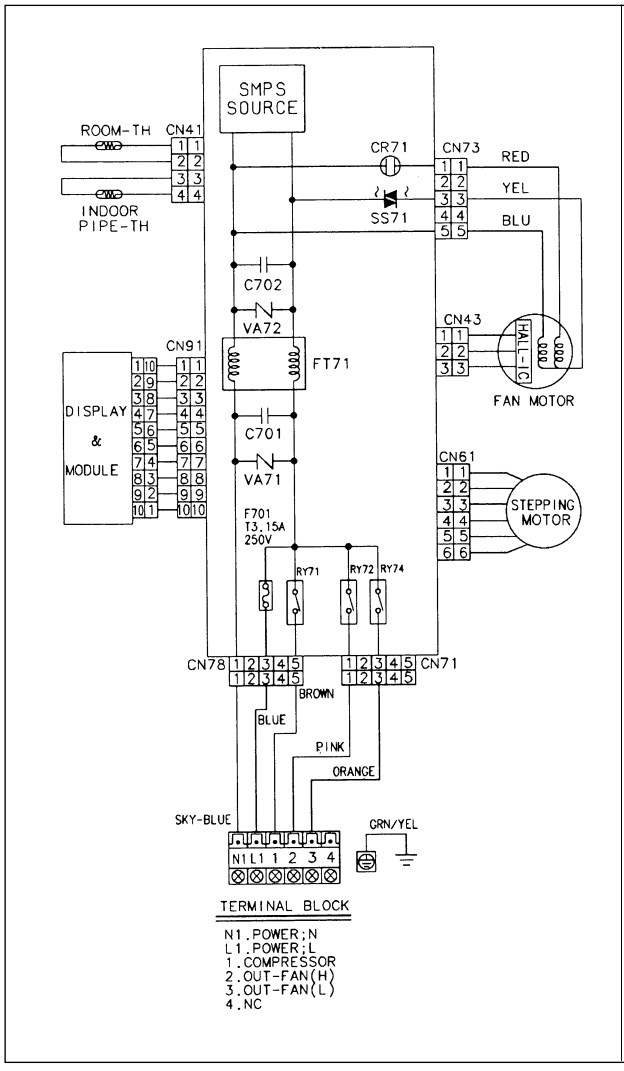
2 Single Type for 18K, 24K Models

2-1. Indoor Unit(AQ✳A✳RC/AS✳A✳RC)

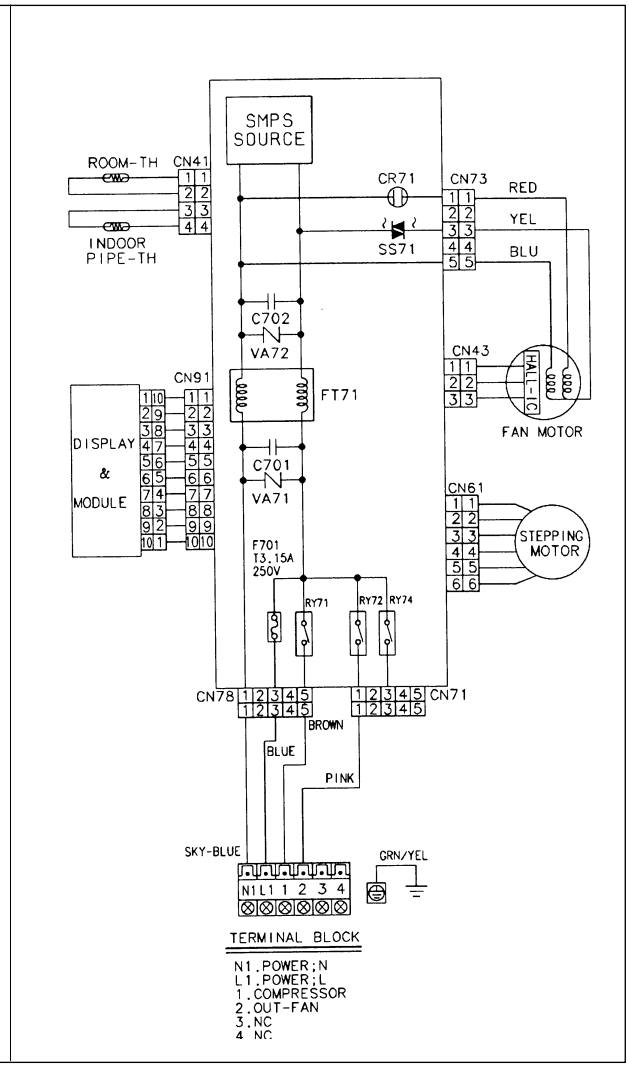
■ AQ24A2RC, AQ18A6RC



■ AS24A2RC



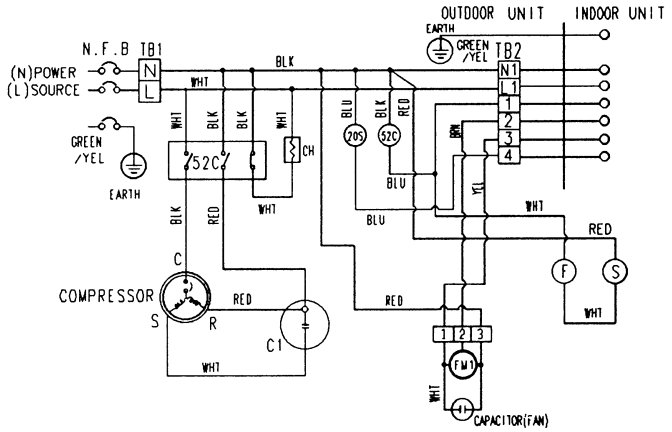
■ AS18A6RC



2-2. Outdoor Unit(UQ✳✳A✳RC/US✳✳A✳RC)

■ UQ24A2RC

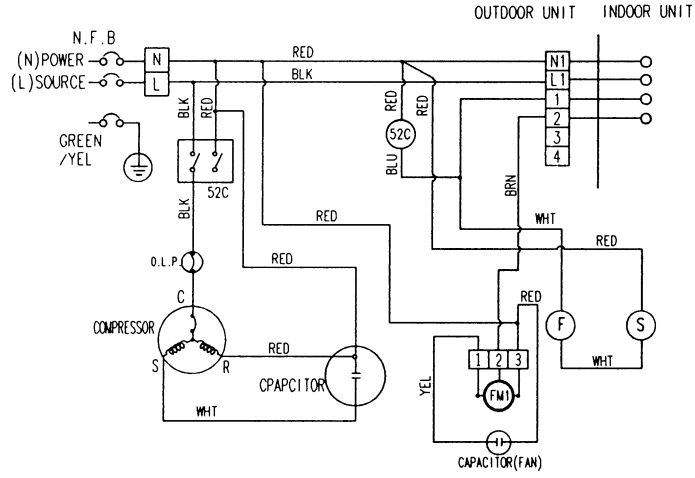
DIAGRAM-OUTDOOR



MARK	NAME	MARK	NAME
52C	MAGNETIC CONTACTOR	TB 1,2	TERMINAL BLOCK
20C	SOLENOID COIL	CH	CRANK CASE HEATER
C1	CAPACITOR	FM1	FAN MOTOR
F	FUSE(2A,250V~)	S	SPARK KILLER

■ UQ18A6RC

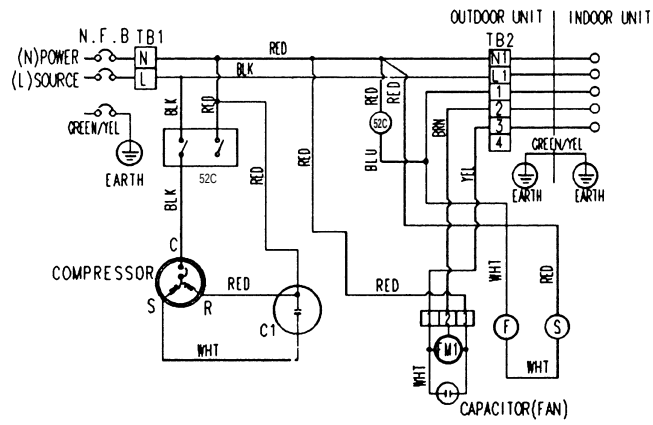
DIAGRAM-OUTDOOR



MARK	NAME	MARK	NAME
52C	MAGNETIC CONTACTOR	TB1, 2	TERMINAL BLOCK
F	FUSE(2A, 250V~)	FM1	FAN MOTOR
S	SPARK KILLER		

■ US24A2RC

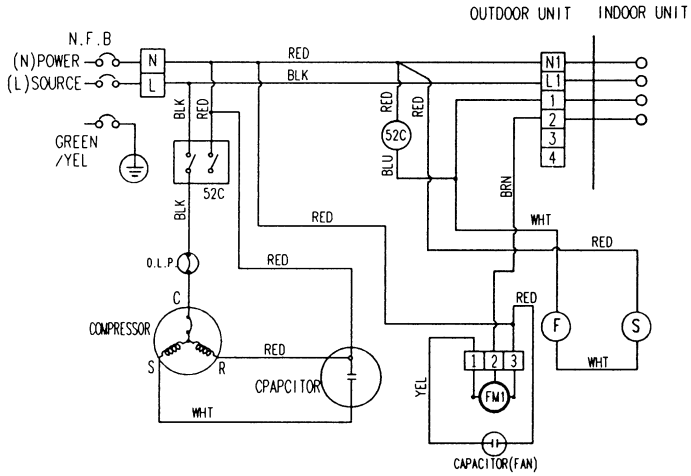
DIAGRAM-OUTDOOR



MARK	NAME	MARK	NAME
52C	MAGNETIC CONTACTOR	TB 1, 2	TERMINAL BLOCK
C1	CAPACITOR	FM1	FAN MOTOR
F	FUSE(2A, 250V~)	S	SPARK KILLER

■ US18A6RC

DIAGRAM-OUTDOOR

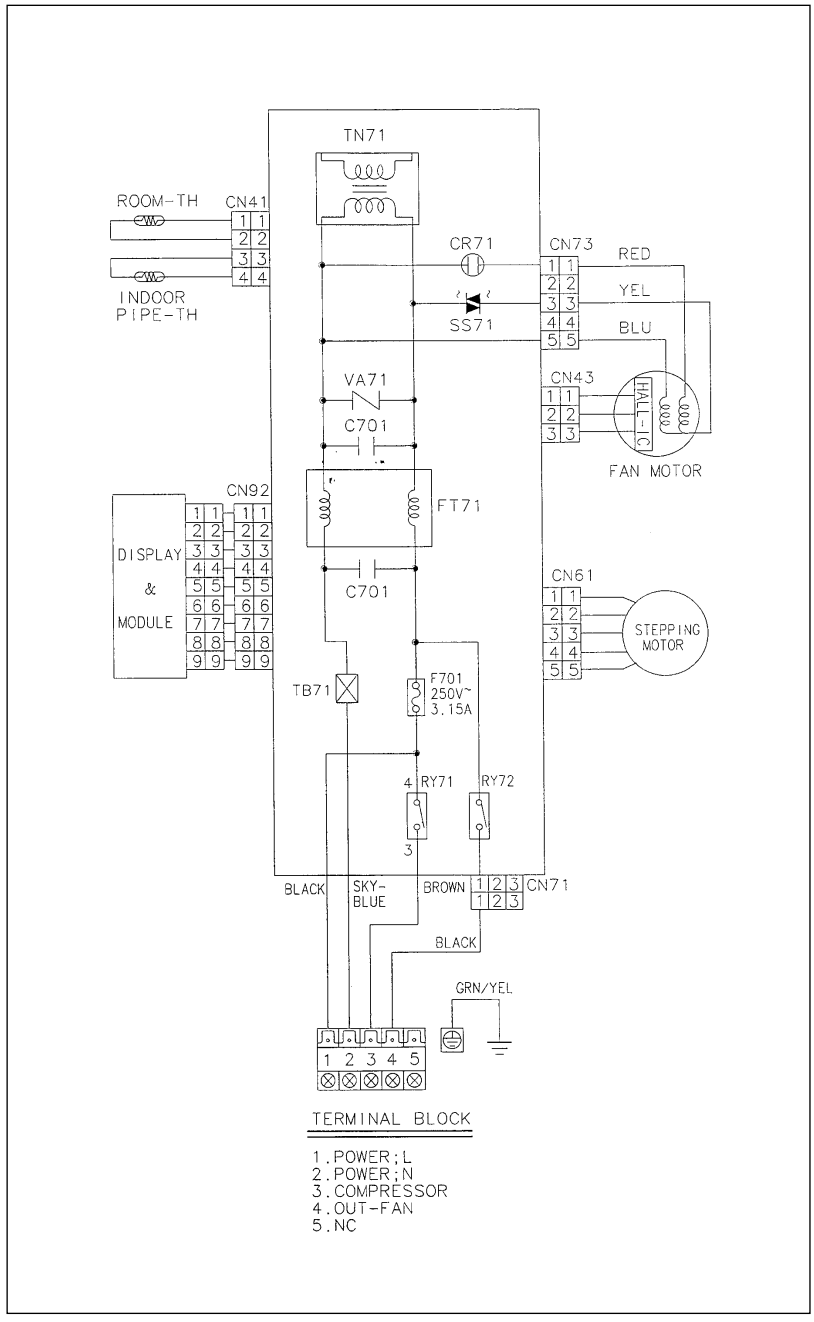


MARK	NAME	MARK	NAME
52C	MAGNETIC CONTACTOR	TB1, 2	TERMINAL BLOCK
F	FUSE(2A, 250V~)	FM1	FAN MOTOR
S	SPARK KILLER		

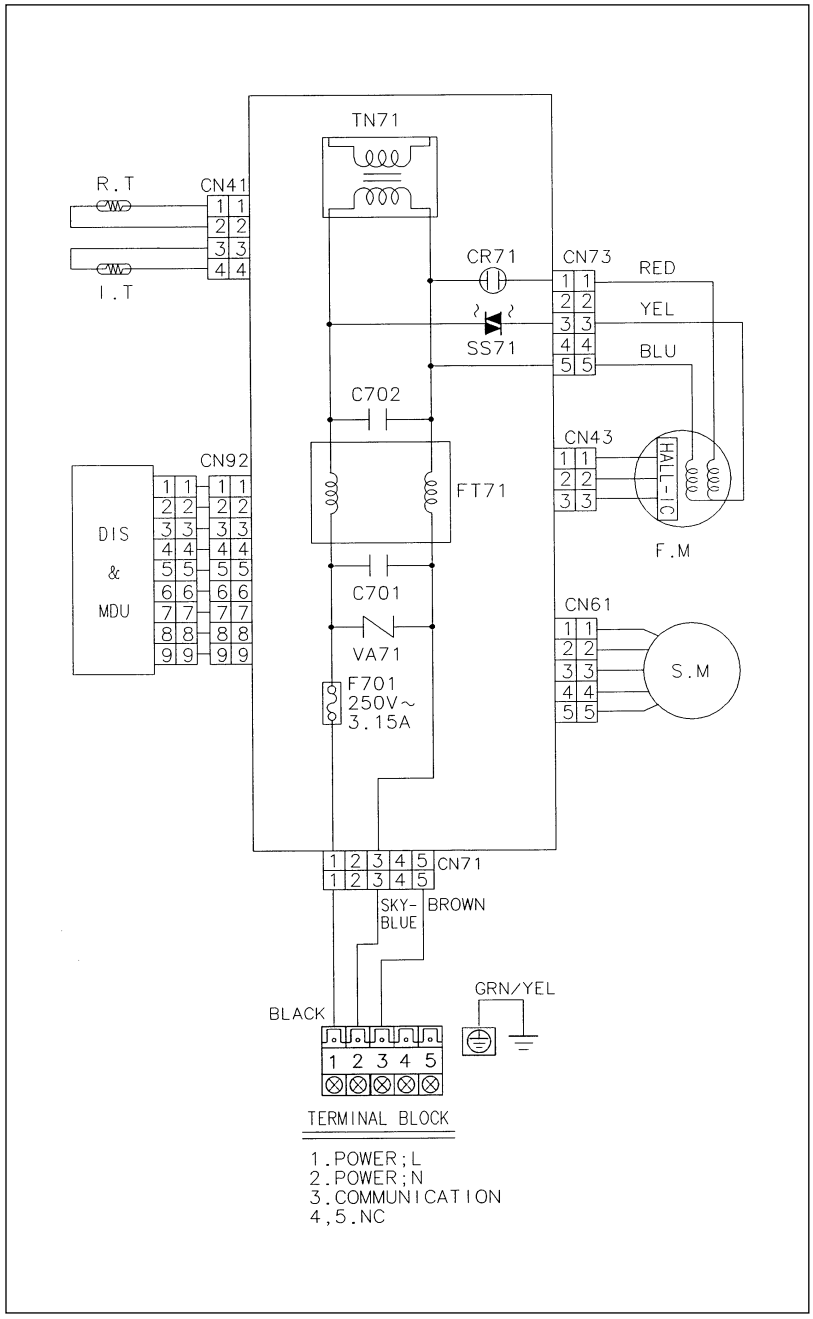
3 Multi Type

3-1. Indoor Unit

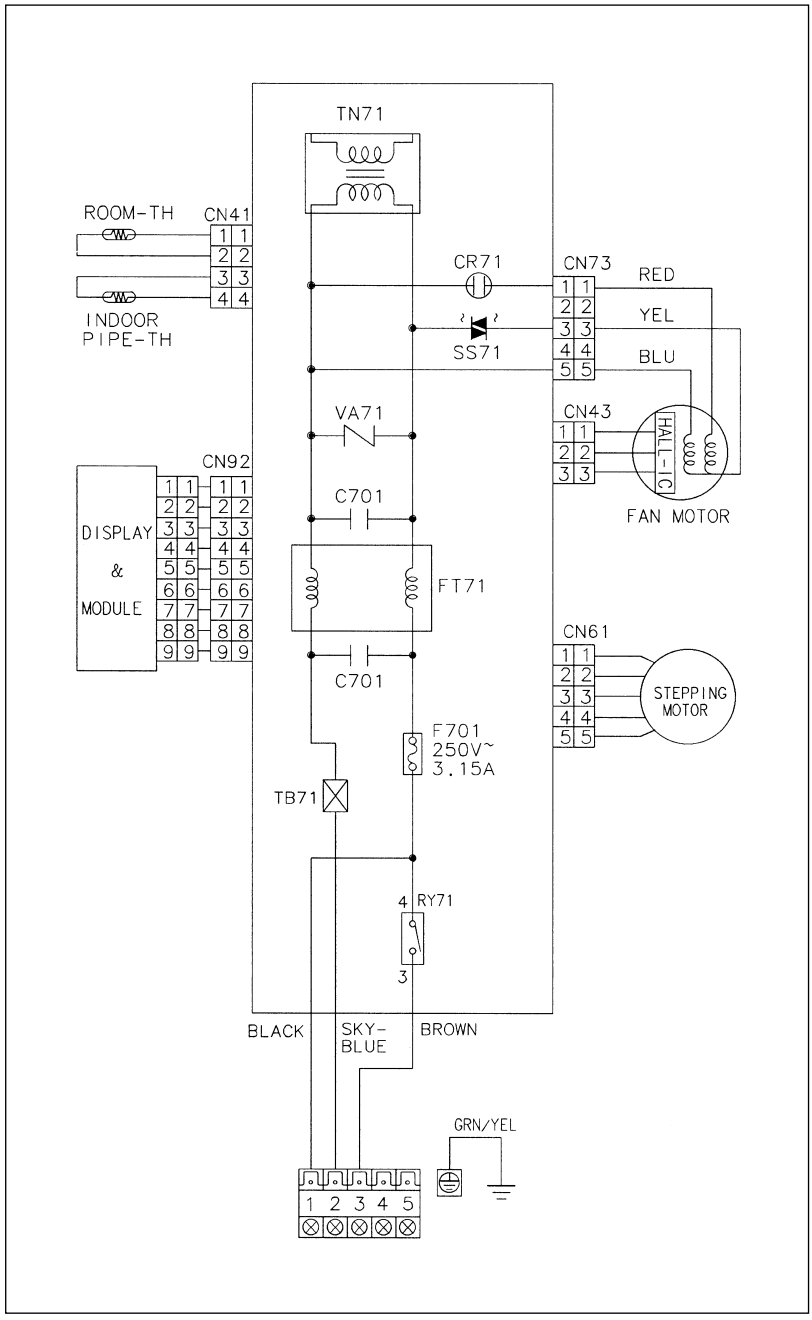
■ AM26A1C13/AM18AC09



■ AD26A1C13/AD18AC09

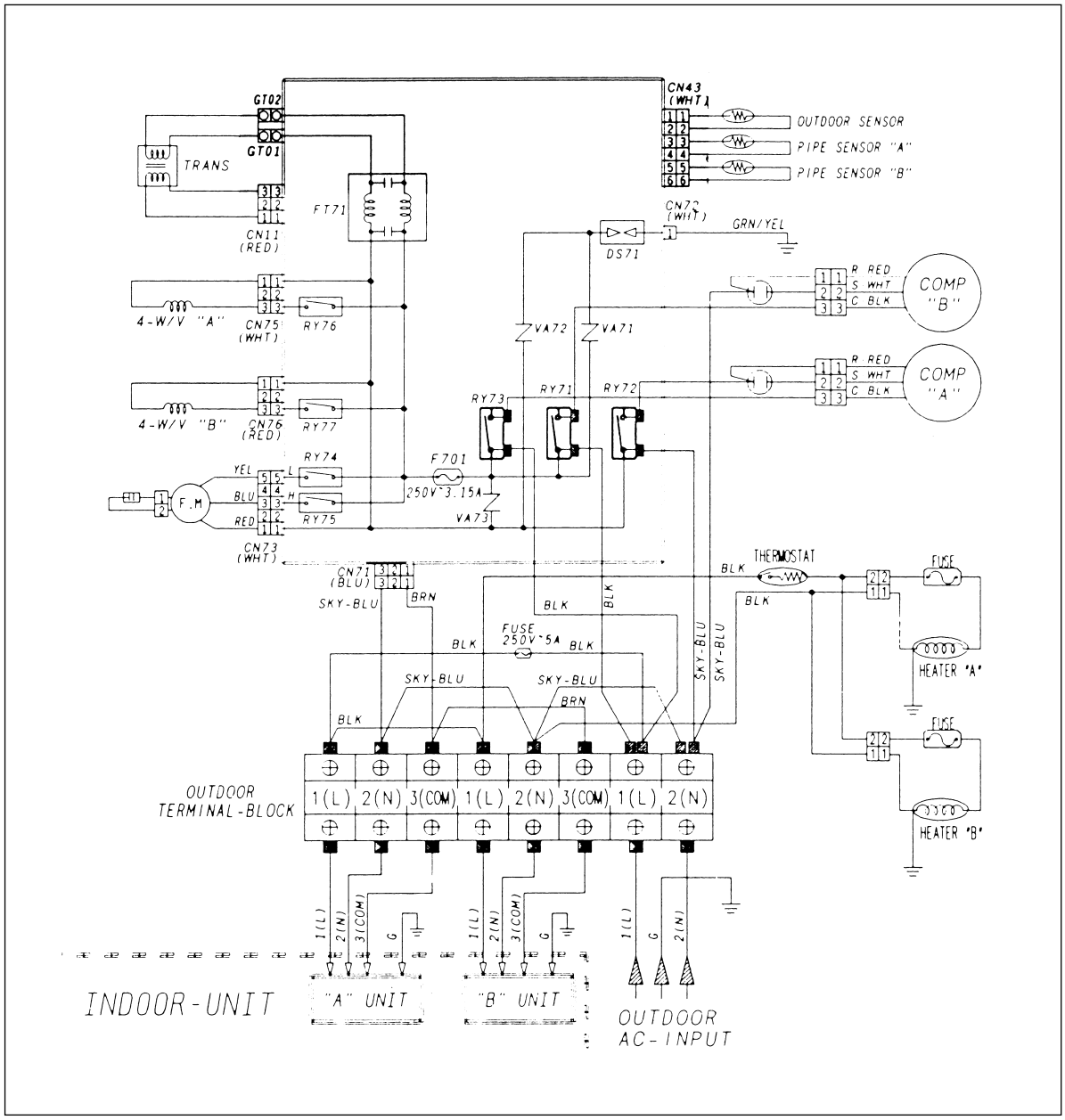


■ AM27A1C07/AM27A1C13

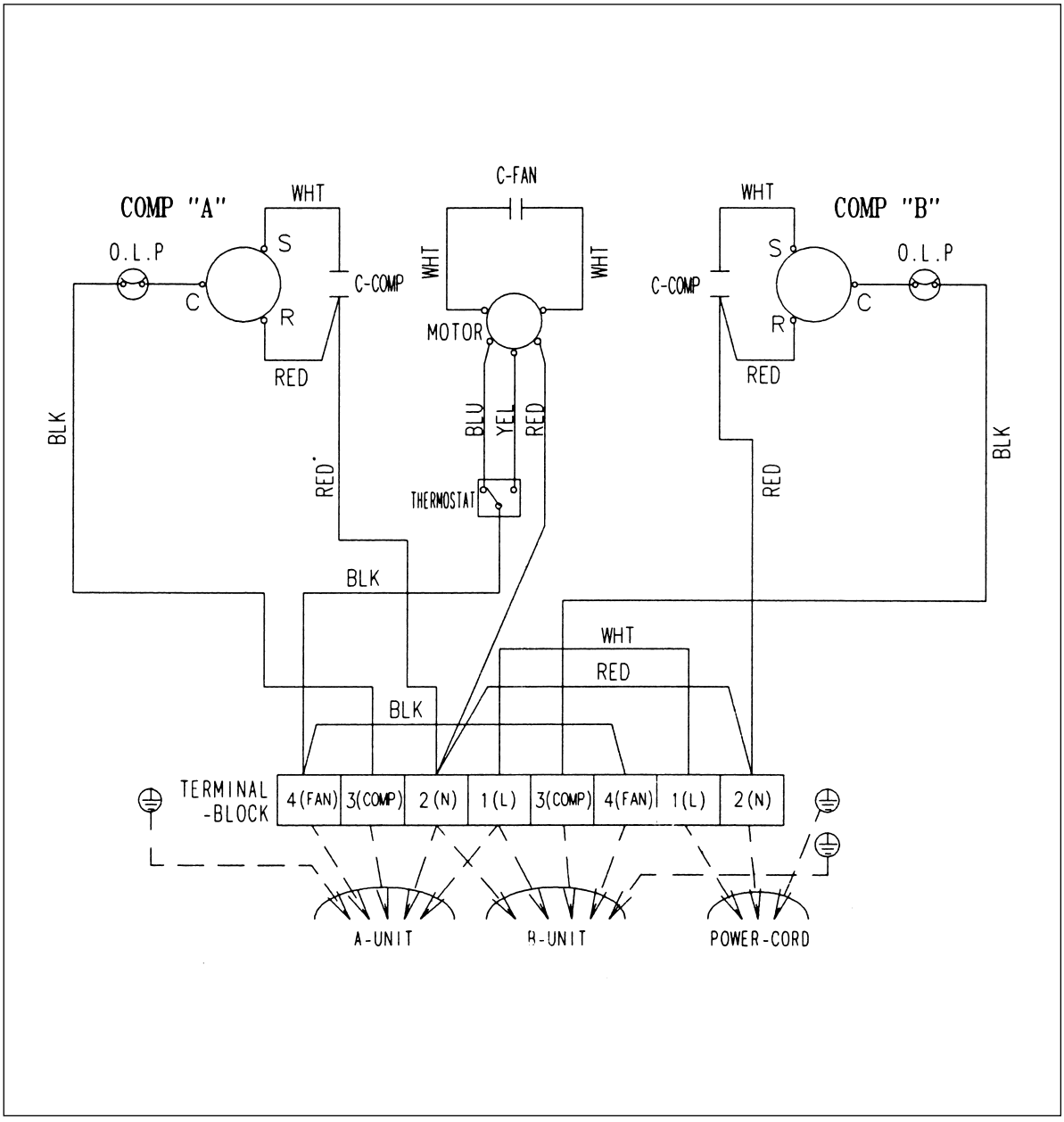


3-1. Outdoor Unit

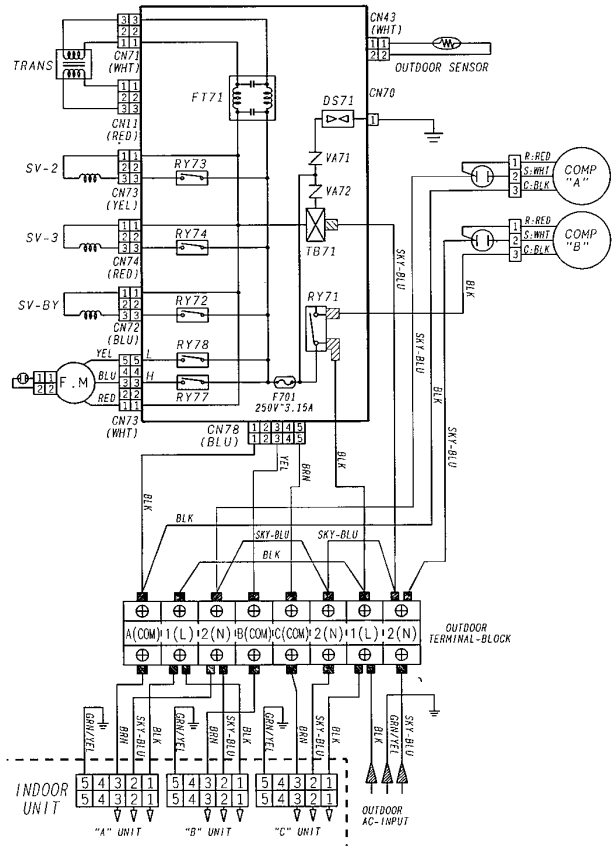
■ UD26A1C2/UD18A1C2



■ UM26A1C2/UM18A1C2



■ UM27A1C3

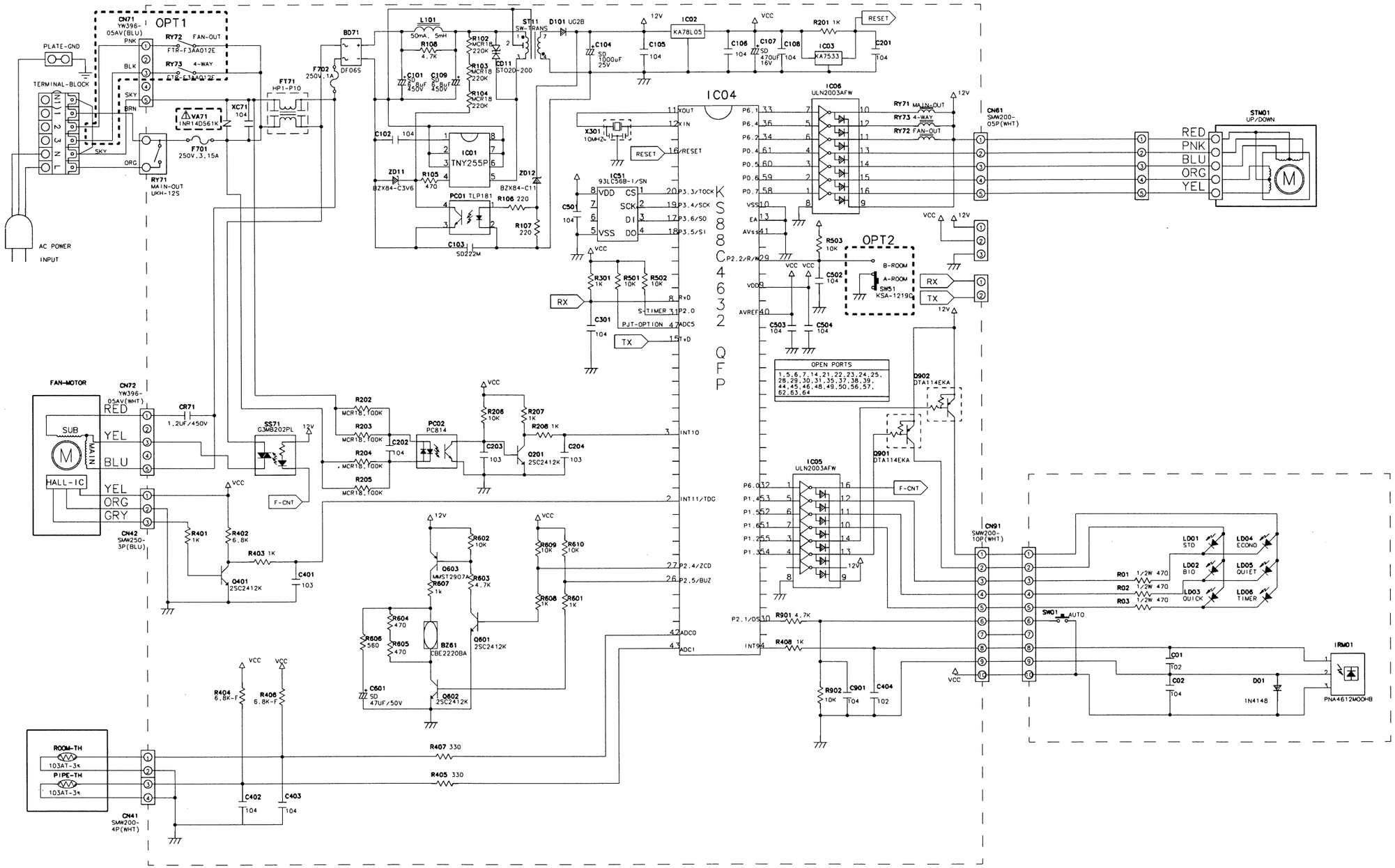

TRANS
CN71 (WHT)
CN11 (RED)
FT71
CN43 (WHT)
OUTDOOR SENSOR
CN70
DS71
VA71
VA72
TB71
SV-2
CN73 (YEL)
RY73
SV-3
CN74 (RED)
RY74
SV-BY
CN72 (BLU)
RY72
RY71
RY78
RY77
F.M
YEL
BLU
RED
CN73 (WHT)
F701 250V 3.15A
CN78 (BLU)
R:RED
S:WHT
C:BLK
COMP "A"
COMP "B"
SKY-BLU
BLK
BRN
GRN/YEL
A(COM) 1(L) 2(N) B(COM) C(COM) 2(N) 1(L) 2(N)
OUTDOOR TERMINAL-BLOCK
INDOOR UNIT
"A" UNIT
"B" UNIT
"C" UNIT
OUTDOOR AC-INPUT

MEMO

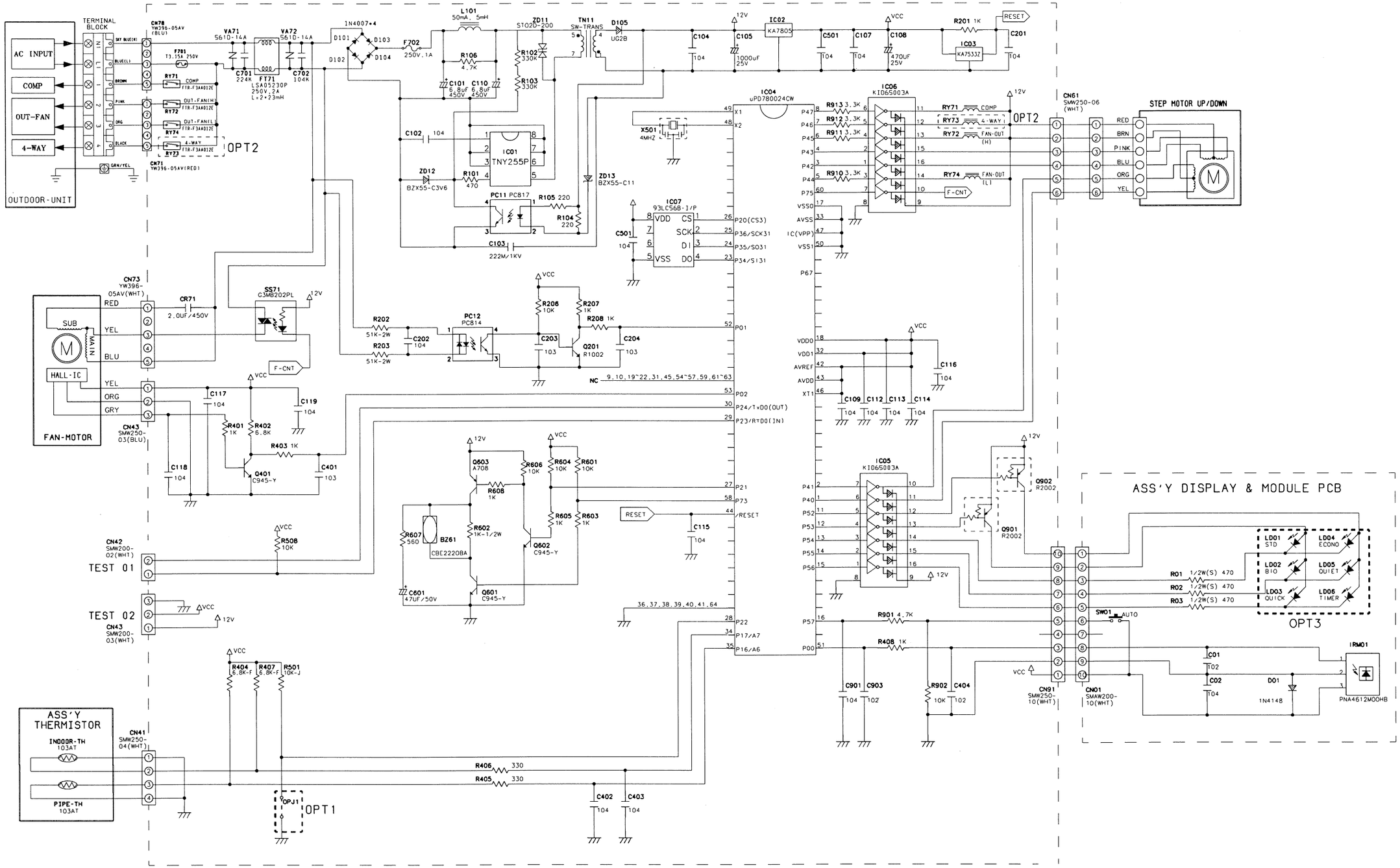
14 Schematic Diagrams

1 Single Type

1-1. Indoor Unit(A***A6M*)

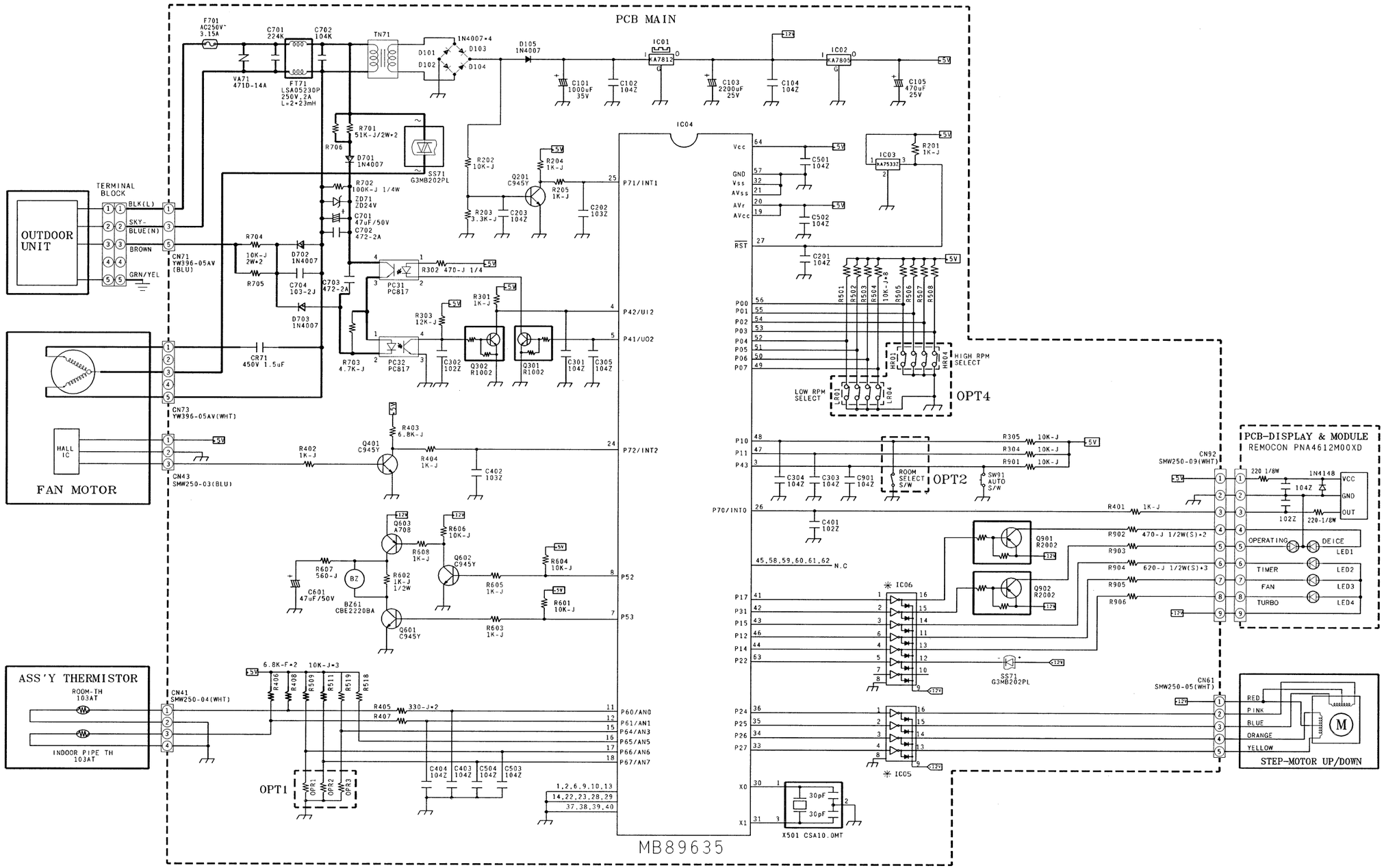


1-2. Indoor Unit(A✻✻✻A✻RC)

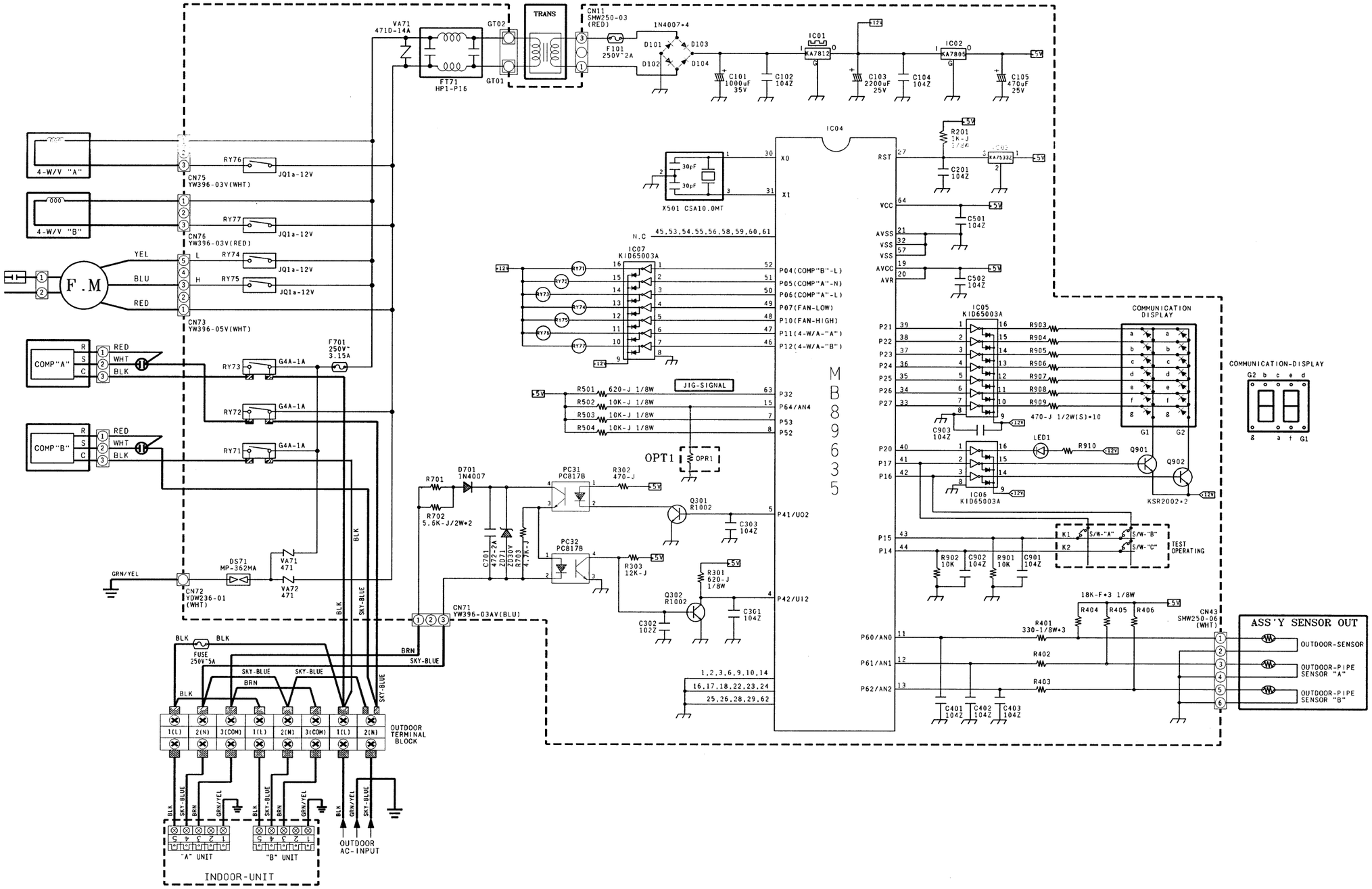


2 Multi Type

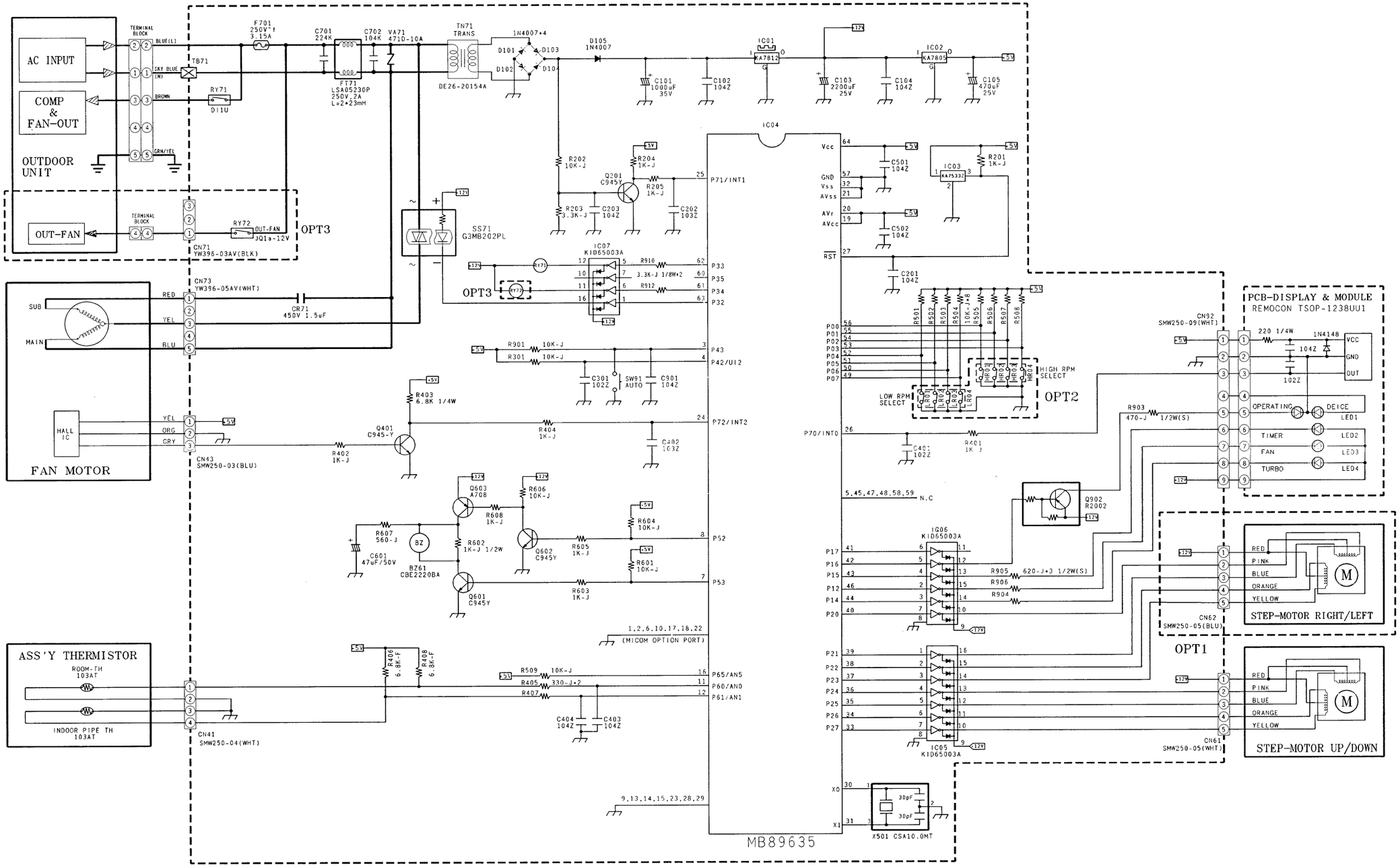
2-1. Indoor Unit(AD26A1C13/09)



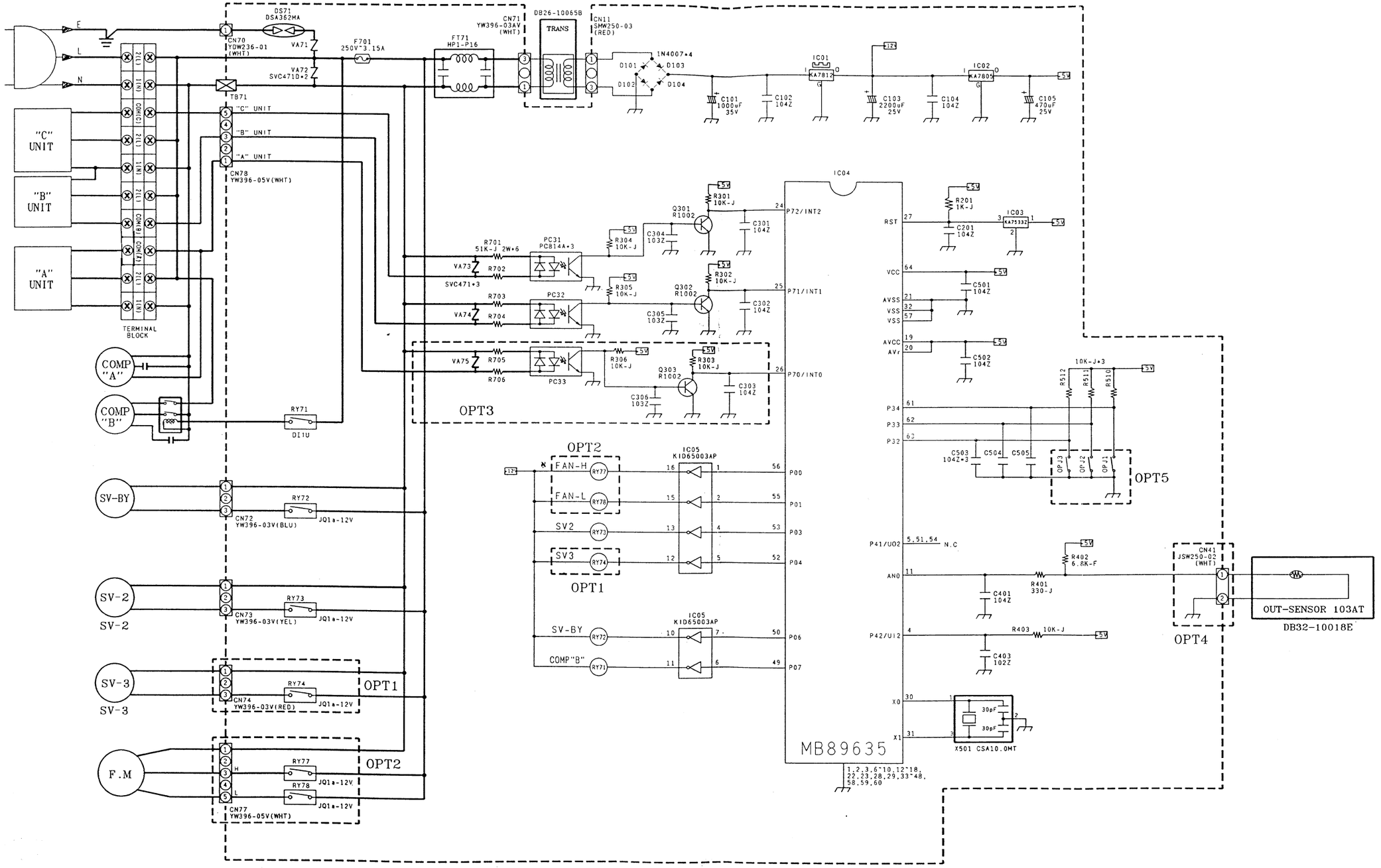
2-2. Outdoor Unit (UD26A1C2/UM18A1C2)



2-3. Indoor Unit (AM**A1C*)



2-4. Outdoor Unit (UM27A1C3)



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